



Texas Agricultural Extension Service

The Texas A&M University System

TEXAS STATE DEPOSITORY

B-6015

LIBRARY
TEXAS A&M UNIVERSITY

MAR 27 1996

TEXAS STATE
DOCUMENTS

Pest Control in Texas Schools

Adopting Integrated Pest Management



[Blank Page in Original Bulletin]

Pest Control in Texas Schools

Adopting Integrated Pest Management

Written and adapted by:

Michael E. Merchant
Extension urban entomologist
Texas Agricultural Extension Service
The Texas A&M University System

Reviewed by:

Phillip J. Hamman
Extension program leader for entomology

Suzanne D. Hyden
Extension specialist - certification training coordinator
Texas Agricultural Extension Service
The Texas A&M University System

Benny M. Mathis
executive director
Texas Structural Pest Control Board

Typesetting by:

Lori Baker
Senior Secretary
Texas Agricultural Extension Service
The Texas A&M University System

Portions adapted from
Pest Control in the School Environment: Adopting Integrated Pest Management
United States Environmental Protection Agency, August 1993.

[Blank Page in Original Bulletin]

Introduction

The health of every child is important. This conviction led the Texas legislature in 1991 to address the way we control pests in public school facilities and how we can reduce the chance of pesticide misuse where kids study and play. The result is the "Integrated Pest Management School Program" – an amendment to Section 4J of the state Structural Pest Control Act, which is administered by the Texas Structural Pest Control Board (SPCB).

Integrated pest management, or IPM, is a multi-tactical approach to preventing pest problems. Since Sept. 1, 1995, every Texas school district must have an official policy stating a commitment to IPM principles for control of pest problems. Each district also must have an on-staff IPM coordinator to oversee and implement this policy. In addition, a special notice to parents must be provided during student registration. In this manual, you'll find the resources you need to comply with these and other provisions of the law.

IPM coordinators must receive a 6-hour total of SPCB-approved training within 12 months of their appointment. SPCB-approved training is available from the Extension Service and some commercial sources; there is no single designated provider. At this date, the SPCB does not require IPM coordinators to file proof of completed training with the Board. However, coordinators should keep such proof in their personnel and IPM policy files.

As an arm of the Texas A&M University System and a respected authority on IPM, the Extension Service will continue development of its curriculum for school IPM coordinators. Please watch for announcements of new training opportunities and resources. Your County Extension Agent may be a valuable contact for keeping informed.

Orders or questions regarding this manual and future Extension training events may be directed to the Extension Service, P.O. Drawer FS, College Station, TX 77841; 409-845-3849.

Best wishes from the Extension Service for a successful integrated pest management program.

[Blank Page in Original Bulletin]

Contents

1	Developing an IPM Policy Statement	1
2	Roles of School Employees in an IPM Program	5
3	Pesticide Product Approval Process	7
	Pesticide Approval Form: A Sample	10
4	About the Pesticide Label	11
5	Developing Invitations for Bid for Pest Control Services in Public Schools	17
	Model Contract Bid Specifications for Texas Public Schools	19
	Weighted Factor Rating Form for Evaluating Pest Control Bids: A Sample	29
6	Options for Noncommercial Pesticide Applicator Certification: A Summary . . .	31
7	Law Pertaining to IPM for Schools: A Summary	35
	Answers to Common Questions about IPM	43
8	Appendix	
	Useful Forms and Resources for IPM Coordinators	45
	Pesticide Approval Form	
	Consumer Information Sheet	
	Emergency Waiver for Schools	
	Notice to Parents	
	Notice of Pest Control Treatment	
	Commercial and Noncommercial Pest Control Use Records	
	Weighted Factor Rating Form for Evaluating Pest Control Bids	
	Pesticide Applicator Training Manuals Order Form	
	Important Phone Numbers and Addresses	

[Blank Page in Original Bulletin]

Developing an IPM Policy Statement

The first step in developing your school's IPM program is drafting an IPM policy. It is important to distinguish between an IPM policy and an IPM plan. A policy is a generalized guide to help school personnel develop a more detailed plan for action. An IPM plan is the more specific instructions about how to implement the policy at various school facilities.

Under Texas law, *all school districts must approve and maintain an official IPM policy statement*. This policy must be kept on file with the district superintendent and the IPM coordinator (Title 22, Texas Administrative Code §595.11 b). The IPM policy should state the intent of the school administration to implement an IPM plan; however, the policy need not include the plan. The policy should succinctly state the district's goals and expectations of staff and contractors.

The policy must be based on generally accepted tenets of integrated pest management, including:

- ◆ strategies that rely on the best combination of pest management tactics that are compatible with human health and environmental protection;
- ◆ proper identification of pest problems;
- ◆ monitoring programs to determine when pests are present or when pest problems are severe enough to justify corrective action;
- ◆ use of nonchemical management strategies whenever practical; and
- ◆ preferential use of least-toxic chemical controls when pesticides are needed.

To help your district develop its own IPM policy statement, the following model is provided for you to adopt or modify as your district determines.

Integrated Pest Management Policy Statement

Independent School District

Approved September 1, 1995

Structural and landscape pests can pose significant problems to people, property and the environment. Pesticides can also pose risks to people, property and the environment. It is therefore the policy of the _____ Independent School District to incorporate integrated pest management procedures into the maintenance program conducted by our district for control of indoor and outdoor pest problems.

Definitions

Pests are populations of living organisms (animals, plants or microorganisms) that interfere with use of school facilities for human purposes. Strategies for managing pest populations will be influenced by the pest species and whether that species poses a threat to people, property or the environment.

Integrated pest management, or IPM, is a strategy that focuses on long-term prevention or suppression of pest populations using a combination of tactics that minimize the impact of control activities on human health and the health of other, nontarget organisms.

An *IPM plan* is a set of procedures detailing how particular pest problems will be handled by District IPM staff. The IPM plan for a particular facility will include descriptions of planned activities to reduce pest presence or maintain a pest-free environment. Details within such plans may include needed facilities or landscape improvements, pest-proofing modifications, approved nonchemical and chemical control activities, a pest monitoring plan, educational plans and criteria for evaluating the need for control or the success of control efforts.

Development of IPM Plans

The District will appoint an IPM coordinator whose duties will include the development of IPM plans for both indoor and outdoor school district facilities. IPM plans will be designed to accomplish the following objectives:

- ◆ Reduce any potential human health hazards or protect against a significant threat to the safety of students, staff or the public.
- ◆ Prevent loss or damage to school structures or property.
- ◆ Prevent pests from spreading into and adversely affecting the community or to plant and animal populations beyond the site.
- ◆ Enhance the quality of life for students, staff and the public.

Essential IPM Plan Components

The District's pest management plans will include the following components:

- ◆ All activities designed to reduce pest populations will be based on an accurate determination of the pest's identity and on knowledge of the pest's biology and life cycle.
- ◆ Significant, recurring pest problems will be observed and recorded by IPM staff using monitoring methods so that pest populations can be detected and control measures applied to the appropriate sites.
- ◆ Predetermined action thresholds for important pest problems will be determined by IPM staff, so that results of inspections and monitoring programs can be used to help staff objectively determine when control actions are justified.
- ◆ The full range of control options including physical controls, mechanical controls, biological controls and chemical controls (including the option of "no action") will be considered when deciding on a pest management action.
- ◆ Educational activities will be conducted to gain cooperation and understanding among District staff, students and the public.

Pesticide Use in School Facilities

The decision concerning whether or not to apply a pesticide will be based on a review of all other available options and a determination that these options are not acceptable or are not feasible. Cost or staffing considerations alone will not be adequate justification for use of chemical control agents. Efforts will be made to avoid the use of pesticides by adequate pest-proofing of facilities, good sanitation practices, selection of pest-resistant plant materials and good horticultural practices.

When it is determined that a pesticide must be used in order to meet important management goals, the least-hazardous material adequate for the job will be chosen.

Cooperation with IPM coordinator

The District will provide administrative support to the IPM coordinator for developing an IPM program that relies on minimal pesticide use. Such support will include efforts to address in a timely fashion, as budgets permit, any structural, horticultural and sanitation modifications recommended by the Coordinator to reduce or prevent pest problems. Furthermore, the District will assist the Coordinator in

developing and delivering materials and programs for staff, students and the public to educate them about the importance of sanitation and pest control.

Contractual Agreements with IPM Providers

All outside contractors providing pest control services will be required to follow the same IPM standards required for in-house staff. All contracted pest control activities will follow IPM plans based on the IPM components outlined above. The District will take steps to ensure that selection of contractors includes consideration of the contractor's ability to provide satisfactory IPM services in addition to price considerations.

Facilities Planning

The District shall include pest management considerations in facilities planning. Such considerations include, but are not limited to, the planting of well-adapted and pest-tolerant plant varieties outdoors; landscape designs that require minimal fertilizer and pesticide inputs; proper placement and types of lighting to reduce pest entry into buildings; placement of dumpsters; storage of pesticide products; and pest-proof design of doors and ventilation systems.

Cooperation with Regulatory Agencies

All pesticide storage, transportation and application will be conducted in accordance with the requirements of the:

- ◆ Federal Insecticide, Fungicide and Rodenticide Act (7 United States Code 136 et seq.)
- ◆ Environmental Protection Agency regulations in 40 CFR
- ◆ Occupational Safety and Health Administration regulations
- ◆ Texas Structural Pest Control Act (Article 135B-6 of the Texas Revised Civil Statutes) with associated regulations (Title 22, Texas Administrative Code, sections 591-599)
- ◆ school district policies and procedures, and local regulations

State regulations followed by the District include requirements to notify students, staff and parents about pesticide applications; keeping proper pesticide application records, including copies of labels and Material Safety Data Sheets (MSDS) for all pesticides used on school facilities; adherence to a 12-hour waiting interval between pesticide application and student occupation of treated facilities; use of least-hazardous pesticides according to the pesticide approval process for schools; and licensing of all staff who apply pesticides. No person shall store or apply any pesticide on school District property without an appropriate commercial or noncommercial pesticide applicator's license.

All pesticide applicators must be educated and trained in the principles and practices of IPM and the use of pesticides approved for use in the school District. All applicators must comply with this IPM policy and follow appropriate regulations and label precautions when using pesticides in or around school facilities.

[Blank Page in Original Bulletin]

Roles of School Employees in an IPM Program

All employees have a role to play in their school's integrated pest management (IPM) program. Even staff with no formal responsibility for pest control affect the success of an IPM program: every employee has some impact on the school environment and the school environment has a great deal to do with whether pests will become a serious problem. Let's look at some of the roles and responsibilities shared by school employees.

IPM Coordinator

The IPM coordinator plays a key role in a school IPM program. Under the Texas Structural Pest Control Act, each school district must have a designated IPM coordinator. This person is responsible for overseeing most of the day-to-day requirements of the district's IPM program. Within one year of being appointed, the IPM coordinator must attend at least 6 hours of training approved by the Structural Pest Control Board.

The duties of the IPM coordinator include:

- ◆ Oversee district pest management personnel. Ensure that employees who apply pesticides have the necessary training, the appropriate personal protective equipment and the licenses required by law.
- ◆ Maintain a priority list of needed structural and landscape improvements.
- ◆ Ensure that all pesticides used on school property are approved by the district for such use.
- ◆ Authorize emergency treatments as provided for under Section 595.6 (d) of the SPCB regulations pertaining to the Structural Pest Control Act.
- ◆ Handle and maintain records relating to pest problems, IPM activities and pesticide-related complaints.
- ◆ Maintain files of pesticide application records, pesticide labels and Material Safety Data Sheets (MSDS).
- ◆ Educate school district administrators and other personnel about IPM requirements (e.g. training requirements, pre-notification and posting requirements, sanitation and pesticide storage).
- ◆ Work with district administrators when contracting for pest control work to ensure that bid specifications comply with the district's IPM policy and the principles of IPM.

The IPM coordinator is a responsible position — one that requires strong people skills, as well as an understanding of facilities management. The IPM coordinator should have the authority to:

- ◆ make reasonable requests for facility improvements that reduce the need for pest control.
- ◆ take corrective action when sanitation conditions pose a threat to the health of children and school district staff.

Custodial Staff

Custodians and grounds-keepers both have important roles to play in an IPM program. Custodial staff are responsible for recognizing and correcting conditions that may lead to pest problems such as water leaks, potential pest entryways and poor sanitation practices.

Outdoors, many pest problems can be avoided through good horticultural practices. With good landscape design and maintenance, the need for many pesticide applications can be avoided. Because custodial and

grounds-keeping personnel rarely are trained to recognize conditions that may lead to pest problems, those staffs should participate in IPM training, perhaps organized by the IPM coordinator.

Kitchen Staff

Food handling and preparation areas are among the most critical areas for pest management. It is essential that kitchen staff understand the importance of good sanitation, kitchen management and proper food storage. A well trained kitchen staff can assist the district's IPM staff in locating and eliminating pest harborage areas. Like custodial staff, kitchen staff should be involved in periodic IPM training.

Administrators

Administrators and school boards set the tone for the IPM program. The first responsibilities of the administrative staff are establishing a pest management policy and selecting a qualified individual for the IPM coordinator's position.

Administrators should have a general understanding of:

- ◆ state requirements pertaining to IPM in schools.
- ◆ the possible penalties for improper pesticide use or the failure to implement IPM.
- ◆ pesticide safety issues and decision-making about which pesticide products are appropriate for district use.

Perhaps the most critical role of administration is assigning priorities for building maintenance requests submitted by the IPM coordinator. Without administrative support for such requests, as well as requests to correct other reported problems (such as inadequate sanitation or improper management practices) IPM programs will be limited in effectiveness.

Teachers and Students

In addition to food handling areas, classrooms and lockers are primary sites for pest problems in school buildings. The most important responsibility of the students and faculty is sanitation: cleaning up food leftovers, proper storage of pet food and snacks, and maintaining orderly and clean classrooms and locker areas. Also, teachers and students who can identify pests may be helpful to the IPM specialist.

Parents

Parents want their children to experience a safe and pleasant learning environment in school. For this reason, parents are usually among the first to speak up about perceived unsafe conditions in a school. Unsafe conditions can occur when pest problems are improperly managed, or when pesticides are overused or used improperly. Parents should never hesitate to bring their concerns about safety issues to the attention of school personnel.

Parents should be aware of pest management practices in their children's schools. Schools, on the other hand, should welcome questions and encourage parents to seek information. Visible interest and concern on the parents' part serves as a stimulus to the school to do the best job it can to provide effective, safe pest control in school facilities. Parents can and should express their views to the IPM coordinator, school superintendent, school board, campus-based improvement committees, PTO or PTA.

Pesticide Product Approval Process

One of the toughest decisions facing a school is how to choose pest control products that are effective, yet pose little risk to students and staff. The school IPM requirements in Texas are designed to help schools in this decision process.

Public schools in Texas may continue to use any EPA-registered pesticide product under the new Texas state laws and regulations governing pesticide use. However, the law does require that schools preferentially use least-toxic products whenever practical. To assist schools in the least-toxic pesticide selection process, the Structural Pest Control Board has established a classification system for pesticides.

Under the new classification program, all pesticide products are grouped into one of three categories: Green List, Yellow List or Red List. The least-toxic products are found in the Green List, while the potentially most hazardous products will be found in the Red List.

Because of their inherent lower-hazard to humans, Green List products can be used at the discretion of the licensed applicator. Yellow and Red List products require pre-approval and the completion of a special Pesticide Use Justification Form before they can be used in a school facility.

Yellow List products require written approval by a certified applicator. If the technician making the application is a certified applicator, the technician may approve the decision to use a Yellow List product. A Pesticide Use Justification Form must be completed at the time of the application, stating the reason why the product was needed. A copy of the form must then be provided to the district IPM coordinator and maintained in a file at the district for a minimum of 2 years. The signed Pesticide Use Justification Form allows the licensee to use the Yellow List product for 3 months or three applications, whichever comes first.

Red List products require written approval in the form of a signed Pesticide Use Justification Form. Both the certified applicator and the district's IPM coordinator (if these are separate persons) must sign the form. A copy of the form must then be kept in a file by the IPM coordinator for a minimum of 2 years. In addition, a copy of the signed form must be sent to the Texas Structural Pest Control Board. The signed Pesticide Use Justification Form allows the licensee to use the Red List product for 3 months or three applications, whichever comes first.

Identifying Pesticides by List

It is relatively simple to identify Red List products by looking at the front of the pesticide label. The "signal word" is one of the required elements found on the front panel of every EPA-registered pesticide label. The signal word is designed to alert the pesticide user to the relative hazard associated with the pesticide. There are three official signal words recognized by the EPA. In order of increasing hazard, they are: CAUTION, WARNING and DANGER.

Products with WARNING or DANGER signal words are automatically placed on the Red List. This does not mean these products should never be used in schools; rather, because of the potential for higher risk with these products, they should be used only after it has been determined that less hazardous products would not be effective or appropriate. Examples of a few of the many available Red List products would

include Baygon 1.5 EC, Demon® EC, Dursban™ 50 WSP, Ficom® W and Triumph® 4E insecticides and Daconil 2787® and Subdue 2E fungicides.

Yellow List fungicides include any pesticide products with a CAUTION signal word, with the exception of Green List products which are discussed below. This group probably comprises the majority of pesticide products on the market. Examples of some Yellow List products that are most commonly used include: diazinon 5G (granular), Ficom® D (dust), malathion EC, PT® 110 Resmethrin, Orthene™ Fire Ant Killer, Sevin® SL and Tempo 20 WP insecticides; Pre-M 60 WP, Round-Up® and Team 2G herbicides (plus most weed-and-feed type products); Alliette® WDG, Bayleton® 25, benomyl and sulfur fungicides.

Green List products are pesticides with CAUTION signal words, but which also fall into one of several categories that are inherently less hazardous to humans and other nontarget organisms. These categories include certain inorganic pesticides, insect growth regulators, insect and rodent baits for crack and crevice placement or for use in tamper-resistant containers, microbial or fungal pesticides, and botanical (or plant-derived) pesticides.

Recognizing Green List Products

Because Green List products are classified by origin or mode-of-action rather than by an easily recognized signal word, they require a higher degree of expertise to identify. If in doubt, it is best to check with a professional pest control operator, your chemical distributor or an Extension specialist for help in identifying these products.

Acceptable *inorganic pesticides* include three types of products: borate-based insecticides, silica gels and diatomaceous earth. Borate-based products include boric acid (a commonly used insecticide for cockroach control) and disodium octaborate tetrahydrate and related compounds (water soluble compounds used in wood preservation and flea control). Borate products must be ingested by the insect to kill. Although toxic to humans if swallowed, these compounds are odor-free and pose little risk from skin contact. Care should be taken not to use boron-based products outdoors around plant material, as they may cause damage to plants. Examples of borate products include Timbor® and Bora-Care™ wood treatments and Perma-Dust PT® 240 boric acid.

Silica gels and diatomaceous earth products are abrasive dusts that kill by absorbing or abrading the waxes on the insect's cuticle. They are most effective in dry, grease-free environments where they can remain effective for years. They are low in toxicity if ingested by humans. However, care should be taken to avoid breathing the airborne dusts. Silica gel products are frequently formulated with another insecticide such as pyrethrum (a botanical insecticide--also acceptable for Green List applications). An example of such a product is PT® 230 Tri-Die.

Insect growth regulators (or IGRs) are man-made copies of special hormones produced by insects to regulate their own growth and development. When fed to an insect or applied to surfaces contacted by insects, IGRs disrupt the growth processes of the pest. Adult insects affected by IGRs do not usually die, but are frequently sterilized. Immature insects are most likely to be affected directly by these products. Commercially available IGR products include pesticides to control cockroaches, fire ants, fleas and certain plant pests. Insect growth regulators are very selective in their activity and generally low in toxicity to humans. Examples of IGRs include methoprene (Precor®, vIGRen™, Gencor®) and fenoxycarb (Logic® and Award® fire ant baits and Torus® flea spray).

Bait formulations are an efficient method for delivering insecticides to the target insect. Because insects seek out and feed on baits, these products can be formulated with lower concentrations of the active

ingredients, making them safer to use than sprays. To be classified as a Green List product, baits must be placed in tamper-resistant bait stations or applied as crack and crevice treatments. Examples of some Green List bait products include most anti-coagulant rodenticide baits, Avert® PT® 310, MaxForce® Ant and Roach Killer bait stations and Seige™ gel insecticides.

Microbial and fungal-based pesticides are a relatively new, and still limited, group of pesticides. These are products that consist of or are derived from microbial and fungal organisms. Because they are or were living organisms that do not attack humans, they are generally safe for use around people. Examples of microbial and fungal-based insecticides include both nonliving (e.g., *Bacillus thuringiensis* products such as Dipel® 2X, Gnatrol®, Steward™) and living organisms (e.g., Bio-Path™ Cockroach Control Chambers).

Botanical insecticides are insecticides derived from plants. Although some of these products can be relatively toxic in concentrated form, they generally break-down quickly after application, resulting in little risk to building inhabitants after a 12-hour waiting period. Common botanical insecticides include azadirachtin (e.g., Azatin™, Benefit®, Margosan-O®), limonene, linalool, pyrethrum or pyrethrins, rotenone and sabadilla).

Botanical insecticides are sometimes mixed with a type of chemical known as a synergist. A synergist is a compound that has no significant toxicity to the pest by itself, but when added to a pesticide, greatly enhances the pesticide's toxicity to the pest. Botanical insecticides must contain no more than 5% synergists in order to be classified as a Green List product. Examples of common synergists include piperonyl butoxide and MGK 264® (N-octyl bicycloheptene dicarboximide).

Multi-cellular, *biological (living) control agents* are not generally considered pesticides by the EPA. Living biological control agents, however, are sometimes used to suppress pest populations, much like pesticides. A number of commercial companies produce a variety of beneficial insects, nematodes and mites for control of numerous pests. Because of their specificity for one or a few pest species, commercially available biological control agents pose little risk to people, plants or beneficial insects. There are no restrictions on the use of biological control agents in schools.

The amount of research that has been conducted on testing biological control agents varies from one species to the next. If in doubt about the efficacy or use of biological control agents, contact an Extension entomologist or Texas A&M University Research and Extension Center (see the appendix). Examples of successful biological control agents include several species of insect-eating nematodes in the genera *Steinernema* and *Heterorhabditis* (e.g., BioSafe™, Nemasys™, Otinem™ and Vector™). These nematodes are effective against certain soil-dwelling pests such as fungus gnats, fleas and, to a lesser degree, white grubs.

Developing an Approval Form

On the following page is a model form for obtaining approval to use pesticides. It has been filled out to represent a sample of a completed form. A blank copy of this form is provided in the appendix.

Sample
Pesticide Approval Form
For Use of Yellow or Red List Products
_____ Independent School District

CHEMICAL REQUESTED

Common name: Hydramethylnon

Trade name: Amdro Formulation: Granular bait

Signal word (check one): ☒ CAUTION (Yellow list) ☐ WARNING (Red list) ☐ DANGER (Red list)

Rate/Concentration to be used: 1 lb./Acre

Estimated amount concentrate to be used: 3 lb

SITE TO BE TREATED

School/facility name: Excel High School

Description of treatment site: football field

Plants to be treated (if applicable): Bermuda grass turf

Size of treatment area (outdoor applications): 3 acres

PEST PROBLEM

Primary pest to be controlled: Fire ants Other pests: Not Applicable

Action threshold available? ☐ YES ☒ NO

Has pest population reached the action threshold? ☐ YES ☐ NO

Monitoring methods used (check all that apply):

☒ visual inspection ☐ traps - type:

☐ Other describe:

Damage observed: 50 - 100 mounds on football field - stings reported by football coach

JUSTIFICATION

Nonchemical procedures and Green list products considered or used prior to request: pyrethrum drenches

Justification for request: Too many mounds to treat economically. Growth regulator bait will not produce required results in the two weeks before football season.

Requested by: Y.C. Critters Date: 9-1-95

Approved by:
Certified Applicator Y.C. Critters Date: 9-1-95

For Red List Products

IPM coordinator Not Applicable Date: _____

Note: For Approved Red List products, a copy of this form shall be submitted within 14 days to the Structural Pest Control Board, P.O. Box 9536-172, Austin, Texas 78766.

About the Pesticide Label

Understanding a pesticide label is an important skill for an IPM Coordinator. This section is provided to explain the various components of an EPA registered pesticide label. Labels are legal documents that provide you with directions on how to mix, apply, store and dispose of the pesticide product. Failure to adhere to label directions is a violation of federal law and is subject to penalties and fines. It is your responsibility to read and understand the label.

The label also provides information to help the IPM coordinator determine a classification for the product under the pesticide approval process. The signal word, in particular, helps identify whether a product is classified as Red List or Green/Yellow List. For more information about determining pesticide classifications, refer to the Section 3 of this manual.

Parts of the Label

To help you better understand labels, each of the label components is explained below. The name of several of the components is followed by a number that corresponds to the numbered parts on a sample label at the end of this section.

Trade, Brand or Product Names (1)

Every manufacturer has trade names for its products. Different trade names are used by different manufacturers, even though the products contain the same active ingredient. The brand or trade name shows up plainly on the front panel of the label and is the one used in advertisements and by company salespeople.

Ingredient Statement (2)

Every pesticide label must list every active ingredient and the percentage of it in the container. Inert ingredients are not usually named, but the label must show what percentage of the total contents are inert. The ingredient statement must list the official chemical and common names of the active ingredients. For example:

Dursban 4E

Active Ingredient:

Chlorpyrifos (0,0-diethyl-0-(3,5,6-trichloro-2-pyridyl) phosphorothioate) 44.4%

Inert ingredients 55.5%

The chemical name is the complex name that identifies the chemical components and structure of the pesticide. Many chemical names are given a shorter common name. However, only those common names officially accepted by the EPA may be used in the ingredient statement on the pesticide label. The official common name is usually followed by the chemical name in the list of active ingredients. The common name for Dursban is chlorpyrifos. By purchasing pesticides according to the common or chemical names, you will be certain of getting the right active ingredient, no matter what the brand name or formulation.

Use Classification Statement (3)

Every pesticide product is classified by the EPA as either restricted use or unclassified/general use. Every pesticide product classified restricted use must carry an explanatory statement in a prominent place at the top of the front panel of the pesticide label.

Type of Pesticide (4)

The type of pesticide is usually listed on the front panel of the pesticide label. This short statement indicates in general terms what the product will control. Examples:

- insecticide for control of certain insects
- herbicide for control of woody brush and weeds
- fungicide for control of plant and animal pathogens

Net Contents (5)

The front panel of the pesticide label shows how much product is in the container. This is expressed as pounds or ounces for dry formulations or as gallons, quarts or pints for liquids. Liquid formulations may also list the pounds of active ingredient per gallon of product.

Name and Address of Manufacturer (6)

The law requires that the manufacturer or formulator of a product put the name and address of the company on the label to identify who makes or sells the product.

Registration Numbers (7)

An EPA registration number (for example EPA Reg. No. 3120 280) must appear on all pesticide labels. This indicates that the product has been registered and its label approved by the EPA. In cases of special local needs, pesticide products may be approved for use in a specific state. These registrations are designated, for example, as EPA SLN NO. MI-860009. In this case, SLN indicated "special local need" and MI means that the product is registered in Michigan.

Establishment Numbers (8)

An EPA establishment number (for example, EPA Est. No. 5840-AZ-1) must also appear on the pesticide label. It identifies the facility that produced the product in case a problem arises or the product is found to have been adulterated.

Signal Words and Symbols (9)

Every pesticide label must include a signal word. This important designation gives the user an indication of the relative toxicity of the product to humans and animals.

The signal word must appear in large letters on the front panel of the pesticide label along with the statement, "Keep Out of the Reach of Children." The following signal words or symbol may be found on pesticide labels.

DANGER—POISON, SKULL AND CROSSBONES. These words and the symbol must appear (in red letters) on all products that are highly toxic by any route of entry into the body. *Peligro*, the Spanish word for danger, must also appear on the label.

DANGER — Products with this signal word can cause severe eye damage or skin irritation.

WARNING — This word signals that the product is moderately toxic orally, dermally or through inhalation, or causes moderate eye or skin irritation. *Aviso*, the Spanish word for warning, must also appear on the label.

CAUTION — This word signals that the product is slightly toxic orally, dermally or through inhalation, or causes slight eye or skin irritation. Choose the least toxic chemical that will give the desired level of pest control and minimize environmental effects such as groundwater contamination.

Precautionary Statements (10)

All pesticide labels contain additional statements to help applicators decide the precautions to take to protect themselves, their employees and other persons (or animals) that could be exposed. Sometimes these statements are listed under the heading "Hazards to Humans and Domestic Animals." They may be composed of several actions.

Routes of Entry Statements - The statements which immediately follow the signal word indicate which route or routes of entry (mouth, skin, lungs) are particularly hazardous and need protection. Many pesticide products are hazardous by more than one route, so study these statements carefully. A DANGER signal word followed by "May be fatal if swallowed or inhaled" gives you a far different warning than DANGER followed by "Corrosive - causes eye damage and severe skin burns."

Specific Action Statements - These statements usually follow immediately after the route of entry statements. The specific action statements help prevent pesticide poisoning by recommending necessary precautions and correct protective clothing and equipment.

Protective Clothing and Equipment Statements - Pesticide labels vary in the type of protective clothing and equipment statements they contain. Many labels carry no statement at all. This does not mean that protective clothing and equipment are unnecessary. The best way to determine the correct type of protective clothing and equipment is to consider the signal word, the route of entry statements and the specific action statement on the label.

Statement of Practical Treatment (11)

This section lists first aid treatments recommended in case of poisoning. All DANGER labels and some WARNING and CAUTION labels contain a note to physicians describing the appropriate medical procedure for poisoning emergencies and may identify an antidote. The label should always be available in emergencies. In the event of a pesticide poisoning, take the label to the hospital with you.

Environmental Hazards (12)

Pesticides can be harmful to the environment. Some products are classified "restricted use" because of environmental hazards alone. Watch for special warning statements on the label concerning hazards to the environment.

Special Toxicity Statements - If a particular pesticide is especially hazardous to wildlife, it will be stated on the label. For example:

- This product is highly toxic to bees.
- This product is toxic to fish.

These statements alert pesticide users to the special hazards posed by use of the product. They help applicators choose the safest product for a particular job and remind them to take extra precautions.

General Environmental Statements - Some of these statements appear on virtually every pesticide label. They are reminders to follow certain common sense actions to avoid contaminating the environment. The absence of any or all of these statements does not indicate that you do not need to take adequate precautions. Sometimes these statements follow a "specific toxicity statement" and provide practical steps to avoid harm to wildlife. Examples of general environmental statements include:

- Do not apply when runoff is likely to occur.
- Do not apply when weather conditions favor drift from treated areas.

Physical or Chemical Hazards

This section of the label describes any special fire, explosion or chemical hazards the product may pose. For example:

- Flammable: Do not use, pour, spill or store near heat or open flame. Do not cut or weld container.

Hazard statements (hazards to humans and domestic animals, the environment and physical or chemical hazards) are not located in the same place on all pesticide labels. Some labels group them under the headings listed above. Other labels may list them on the front panel beneath the signal word. Still other labels list the hazards in paragraph form somewhere else on the label under heading such as "Note" or "Important." Prior to use, the label should be examined for these statements to ensure knowledgeable and safe handling.

Reentry Statement (13)

Some pesticide labels contain a reentry interval precaution. This statement tells how much time must pass before people can reenter a treated area without appropriate protective clothing and equipment. Reentry intervals are set by both the EPA and some states. Reentry intervals set by states are not always listed on the label: It is your responsibility to determine if one has been set (For example, the 12-hour minimum reentry period for students in Texas public schools).

If no reentry statement appears on the label or none has been set by the state, then all unprotected workers must wait at least until sprays have dried or dusts have settled before reentering without protective equipment. That is the minimum legal reentry interval.

Directions for Use

These instructions are the best way to find out how to apply the product. The use instructions will tell you:

- The pest or site the product is intended to protect.
- The proper equipment to be used and mixing instructions.
- How much to use (rate) and how often to apply.
- Compatibility with other often used products.
- Phytotoxicity and other possible injury.
- Where and when the material should be applied.
- The potential for property damage and contamination of household goods and food.

Failure to follow the instructions on a label can result in a serious pesticide accident and constitutes a legal violation subject to civil or criminal prosecution. Remember, the label is a legal document. The user is liable for personal injury, plant damage or pollution incurred through misuses of a pesticide.

3

RESTRICTED USE PESTICIDE

For retail sale to and use only by Certified Applicators, or persons under their direct supervision, and only for those uses covered by the Certified Applicator's certification.

CHEMCO

Reg. U.S. Pat. & TM Off.

1

NO PEST

INSECTICIDE 4

2	ACTIVE INGREDIENT:	BY WEIGHT
	deltathion (1,2 phospho-(5)-4 chloromethane).....	50%
	INERT INGREDIENTS.....	50%
	TOTAL	100%

7 EPA Reg. No. 999-000

8 EPA Est. No. 000

10 HAZARDS TO HUMANS AND DOMESTIC ANIMALS

Wear long-sleeved clothing, full length trousers, eye protection, and protective gloves when handling. Wash hands and face before eating or using tobacco. Bathe at the end of work day, washing entire body and hair with soap and water. Change clothing daily. Wash contaminated clothing thoroughly before reusing.

11 STATEMENT OF PRACTICAL TREATMENT

If Swallowed: Do not induce vomiting. Contains aromatic petroleum solvent. Call a physician or poison control center immediately. If In Eyes: Flush with plenty of water for at least 15 minutes. Get medical attention. If On Skin: Wash with plenty of soap and water. Get medical attention if irritation persists. If Inhaled: Remove to fresh air immediately. Get medical attention.

NOTE TO PHYSICIANS: "No Pest" is a cholinesterase inhibitor. Treat symptomatically. If exposed, plasma and red blood cell cholinesterase tests may indicate significance of exposure (baseline data are useful). Atropine, only by injection, is the preferable antidote. Oximes, such as 2-PAM/protopam, may be therapeutic if used early; however, use only in conjunction with atropine. In case of severe acute poisoning, use antidote immediately after establishing an open airway and respiration.

12 ENVIRONMENTAL HAZARDS

This pesticide is toxic to birds and extremely toxic to fish. Do not apply directly to water. Do not contaminate water by cleaning of equipment or disposal of waste. This product is highly toxic to bees exposed to direct treatment or residues on blooming crops or weeds. Avoid use when bees are actively foraging.

"No Pest" is a pesticide which can move (seep or travel) through soil and can contaminate groundwater which may be used as drinking water. "No Pest" has been found in groundwater as a result of agricultural use. Users are advised not to apply "No Pest" where the water table (groundwater) is close to the surface and where the soils are very permeable (i.e., well drained soils such as loamy sands). Your local agricultural agencies can provide further information on the type of soil in your area and the location of groundwater.

13 REENTRY STATEMENTS

Do not apply this product in such a manner as to directly or through

drift expose workers or other persons. The area being treated must be vacated by unprotected persons.

Do not enter treated areas without protective clothing until sprays have dried.

Written or oral warnings must be given to workers who are expected to be in a treated area or in an area about to be treated with this product. When oral warnings are given, warnings shall be given in a language customarily understood by workers. Oral warnings must be given if there is reason to believe that written warnings cannot be understood by workers. Written warnings must include the following information: "WARNING! Area treated with "No Pest" insecticide on (date of application). Do not enter without appropriate protective clothing until sprays have dried. If accidental exposure occurs, follow the instructions below." (Written warnings must include the STATEMENT OF PRACTICAL TREATMENT given at the beginning of this label).

STORAGE AND DISPOSAL

PROHIBITIONS: Do not contaminate water, food or feed by storage or disposal. Open dumping is prohibited. Do not reuse empty container.

STORAGE: Store in original container only. Keep container closed when not in use. Store "No Pest" in a well ventilated clean dry area out of reach of children and animals. Do not store in areas where temperature averages 115°F (46°C) or greater. Do not store in or around the home or home garden. Do not store near food or feed. In case of spill or leak on floor or paved surfaces, soak up with sand, earth or synthetic absorbent. Remove to chemical waste area.

PESTICIDE DISPOSAL: Pesticide wastes are toxic. Improper disposal of excess pesticide, spray mixture or rinsate is a violation of federal law. If these wastes cannot be disposed of by use according to label instructions, contact your State Pesticide or Environmental Control Agency or the Hazardous Waste Representative at the nearest EPA Regional Office for guidance.

CONTAINER DISPOSAL: Metal Containers: Triple rinse (or equivalent). Then offer for recycling or reconditioning or puncture and dispose of in a sanitary landfill, or by other procedures approved by state and local authorities. Plastic Containers: Triple rinse (or equivalent). Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or incineration, or, if allowed by state and local authorities, by open burning. If burned, stay out of smoke. Glass Containers: Triple rinse (or equivalent). Then dispose of in a sanitary landfill or by other approved state and local procedures.

KEEP OUT OF REACH OF CHILDREN

9



DANGER POISON

PELIGRO



6 CHEMCO CHEMICAL COMPANY, East Lansing, MI 48823

5 Net Contents - 1 gallon

2.

Developing Invitations for Bid for Pest Control Services in Public Schools

Although Integrated Pest Management can be implemented successfully by school employees, some school districts may wish to establish a contract with one or more pest control firms to provide pest control services. A combination of in-house and contracted functions may suit the needs of some school systems. These approaches each have advantages and disadvantages; school officials must decide which option is best for their district.

Advantages of Using In-House Personnel

By using in-house personnel, the district avoids potential difficulty with locating a reputable and reliable firm and procuring bids. The district also maintains greater control over personnel selection and quality control.

Unlike outside contractors, who work mainly after school hours, in-house employees may find it easier to communicate and develop rapport with other school personnel. Some schools find it more efficient and cost-effective to combine certain pest control activities with other maintenance jobs performed by licensed in-house employees. Examples include treatment of fire ant mounds found during lawn mowing or application of residual dusts during routine cleaning.

Advantages of Contractual Agreements

Professional pest control personnel often have more varied experience, more classroom and field training and greater familiarity with treatment techniques that safely and effectively control pests. By contracting with a pest control company, the school district eliminates or reduces the need to train school personnel and maintain pesticide applicator licenses for employees. Having an outside contractor may reduce the potential liability of the district with regard to pesticide use. It also eliminates the need for special storage and disposal sites for pesticides.

Finally, pest control activities normally must be performed on weekends or after-hours to meet the waiting period required by the state. By hiring an outside contractor, the district avoids overtime expenses.

Importance of Bid Specifications

Stringent, thorough bid specifications are essential. Well-designed and explicit bid specifications can help eliminate the problem of low bids by firms that are unable or unwilling to provide the quality of work your school district should expect.

School officials should inquire with local Better Business Bureaus or State Regulatory Agencies, such as the Structural Pest Control Board, to determine whether complaints about the prospective company are regularly received. The Structural Pest Control Board can provide verification of certification and licensing of businesses and personnel.

Essential Elements of IPM Bid Specifications

The following are some suggested elements for IPM bid specifications:

- ◆ Prospective bidders should conduct a thorough on-site inspection before submitting a bid. This provides an overview of the facilities and pest problems so the bidders can make a realistic estimate of minimum service times required to do the job.
- ◆ Minimum service times for each site defined by the school district should be provided as part of each bid. Bidders should understand that minimum service times are an expectation of the contract. Any failure by the contractor to meet these minimum service times can be grounds for cancellation of the contract by the school district.
- ◆ Bidders should understand and agree to follow school district guidelines for the use of the least toxic materials necessary to provide satisfactory pest control. Bidders should agree to follow the approved pesticide list criteria established by the Structural Pest Control Board, including the filing of required request forms when use of Yellow or Red List pesticides is deemed necessary by the contractor or the IPM coordinator.
- ◆ Appropriate monitoring tools and procedures should be used on a regular basis by the contractor to locate pest infestations and assess the need for corrective treatment.
- ◆ Bidders should agree to provide the school district with copies of labels and Material Safety Data Sheets (MSDS) for all products to be used on school district property. The school district reserves the right to approve or disapprove the use of any pesticide or device.
- ◆ Crack and crevice or void treatments are preferred over aerosol, broadcast, spot and baseboard treatments. Use of aerosol or machine generated fogs, mists or space sprays of any kind should not be allowed on school district premises without prior written approval from the IPM coordinator.

These and other provisions are spelled out in the following set of model bid specifications. *These specifications are not requirements, only a suggested model for schools attempting to implement an indoor (structural) IPM program.*

Some school districts may want to incorporate elements of the model contract into existing bid specifications; others may adopt these requirements in total, with additions as suggested by the IPM coordinator, purchasing officer or other business personnel. To save space, many standard clauses are omitted from the following contract.

Model Contract Bid Specifications for Texas Public Schools

April 1995 Version

Note: Italics indicate instructional language for the purchasing officer's attention or suggested specifications which the District may wish to modify to suit its individual needs. The wording and content of these specifications are provided merely as guidance for districts wishing to ensure that contractors adhere to IPM principles. Schools are not legally required to use all or any portion of these bid specifications.

Description of Services

Introduction. The purpose of this bid is to provide _____ (district name) with a source to provide pest management services at the prices offered herein, for the term of the agreement and any renewal periods. It is the policy of the _____ (district name) to use Integrated Pest Management (IPM) as the strategy for control of pests in and around school facilities. The following description details the District's understanding of the scope and type of IPM services to be rendered.

Bidders should read the entire set of specifications carefully, as these will form the basis of the contractual agreement with the District. Failure to comply with the specifications may provide grounds for termination of the contract agreement. Bids should reflect not only the expected costs to the Contractor of providing basic pest control services, but also the costs of providing supplementary services such as reporting, emergency treatments, in-service trainings and quality control activities.

Bid Submittal Requirements

Districts may insert their standard contract clauses and requirements here. Contracts typically include clauses on: pricing, price escalation, contract extensions, cancellation, insurance requirements, workers' compensation, subcontracting, bid bonds, payment policy and conditions for acceptance of contracts, etc. The following clauses are relevant specifically to pest control contracts and are included to assist the District in developing pest control specifications.

Site Visits. Bidder is required to inspect all premises to be covered in the contract and render a bid detailing specific charges for each of the listed sites/facilities. Bidders may examine the facilities *Monday through Friday between the hours of 8 am and 5 pm* by calling _____, at ____ - ____ - _____. Bids will not be accepted from prospective Contractors who have not conducted site visits prior to submitting their bids.

Qualification of bidders.

1. Bids shall be considered only from Bidders who, in the judgment of the District, are regularly established in business, financially responsible, able to show evidence of satisfactory past performance and ready, willing and able to render prompt and satisfactory services.
2. Each contractor shall furnish, with his bid, documentation specifically stating: (1) that his company has been in business for at least ____ (5) years; and (2) that he has available under his direct employment and supervision the necessary personnel organization and facilities to properly fulfill all the service and conditions required under these specifications.
3. Each contractor shall complete the **References** section of this bid and list customers who have contracts for service similar to that specified.

4. The District may request other information sufficient to determine bidder's ability to meet the minimum standards listed above. Request for information contained in this Section also may occur at any other time during the effective period of this contract or any extension/renewal thereof.

References. The references section must be filled out completely. Failure to do so, or references giving unsatisfactory recommendations, may be reason to disqualify the bid. If the references given are not, in the opinion of the District, applicable to a contract of this magnitude, the District may contact other firms with whom the bidder has or is currently providing services as a means of validating compliance or proving noncompliance with the references requirement.

Please list three (3) references of comparable size to _____ (district name) who have used your pest control services on a regular basis within the past year (preferably educational institutions).

Company Name: (1) _____

Person to Contact _____

Company Address _____

City, State, Zip _____

Telephone _____

Company Name: (2) _____

Person to Contact _____

Company Address _____

City, State, Zip _____

Telephone _____

Company Name: (3) _____

Person to Contact _____

Company Address _____

City, State, Zip _____

Telephone _____

Board Certified Entomologist. Preference shall be given to bidders with a trained entomologist on staff, or access to one as a consultant. A Board Certified Entomologist (B.C.E.) is a person with formal training in entomology whose expertise has been examined and certified by the Entomological Society of America. (For more information about B.C.E.s in your area, contact the Entomological Society of America at 9301 Annapolis Road, Suite 300, Lanham, MD 201706-3115; Phone: 301-731-4535)

Does your company have a Board Certified Entomologist on staff? ____ YES ____ NO

If you answer NO, please provide the name and address of a B.C.E., or other trained entomologist, that your company uses.

Name: _____ B.C.E.? ____ YES ____ NO

Address: _____

City: _____

Phone: (____) ____ - _____

Questions. If there are any questions regarding this bid or should a conflict of terminology on this bid arise, please contact _____, *Coordinator of Purchasing*, at _____ (phone) or _____, IPM coordinator, at _____ (phone) for clarification or issuance of an official addendum to resolve any conflicts. Specifications not listed in this bid or not included in official addenda are not applicable to this bid.

Scope of Work

Description of Services. The Contractor shall provide a comprehensive Integrated Pest Management (IPM) Plan for the buildings and other areas specified herein. This Plan shall be in accordance with the District's IPM Policy. IPM is a process for achieving long-term, environmentally sound pest suppression through the use of a variety of technological and management practices. Control strategies in an IPM Plan should extend beyond the application of pesticides to include structural and procedural modifications that reduce the food, water, harborage and access used by pests.

The Contractor shall furnish all supervision, labor, materials and equipment necessary to accomplish the surveillance, trapping and pesticide application components of the IPM Plan. The Contractor shall also provide detailed, site-specific recommendations for structural and procedural modifications necessary to achieve pest prevention.

Pests Included and Excluded. The Contractor shall adequately suppress the following pests:

- ◆ Indoor populations of commensal rodents (e.g., Norway and roof rats, house mice), cockroaches, ants (including, but not limited to, fire ants and Pharaoh ants*), flies, spiders and any other arthropod pests not specifically excluded from the contract.
- ◆ Populations of the above pests that are located outside of the specified buildings, but within areas immediately adjacent to buildings.
- ◆ Winged termite swarms emerging indoors.

Populations of the following pests are excluded from this contract:

- ◆ Termites, carpenter ants and other wood-destroying organisms.
- ◆ Mosquitoes.
- ◆ Birds, bats, snakes and all other vertebrates other than commensal rodents.
- ◆ Pests that primarily feed on outdoor vegetation.

General Contractor Responsibilities

Initial Inspections of Facilities. The Contractor shall conduct a thorough initial inspection of each building or site within ____ (10) days of the initiation date of the contract. The purpose of the initial inspections is for the Contractor to evaluate the pest control needs of all premises and to identify problem areas and any equipment, structural features or management practices that are contributing to pest infestation. Access to building space shall be coordinated with the IPM coordinator. The IPM coordinator will inform the Contractor of any restrictions or areas requiring special scheduling.

* District may be charged for the additional cost of Pharaoh ant bait materials.

Pest Control Plan. Before rendering service, within ____ (10) days after the initial inspection, the Contractor shall submit to the IPM coordinator a Pest Control Plan for each building or site. Within ____ (5) working days of receiving the Pest Control Plan, the IPM coordinator will decide if the Plan is acceptable. If aspects of the Pest Control Plan are incomplete or disapproved, the Contractor shall have ____ (2) working days to submit revisions. The Contractor should be on site to initiate service within ____ (5) working days following notice of approval.

The Pest Control Plan shall consist of five parts as follows:

- A. Proposed methods and equipment for service: The Contractor shall provide a summary of proposed control methods including current labels and Material Safety Data Sheets (MSDS) of all pesticides to be used, brand names of pesticide application equipment, rodent bait boxes, insect and rodent trapping devices, pest monitoring devices, pest surveillance and detection equipment and any other pest control devices or equipment that may be used to provide service.
- B. Proposed methods for monitoring and surveillance: The Contractor shall describe methods and procedures to be used for identifying sites of pest harborage and access and for making objective assessments of pest population levels throughout the term of the contract. In addition, the Contractor will work with the IPM coordinator to establish population levels that constitute unacceptable levels of pest presence in school facilities.
- C. Service schedule for each building of site: The Contractor shall provide complete service schedules that include planned frequency of Contractor visits, specific day(s) of the week for Contractor visits and approximate duration of each visit.
- D. Description of any structural or operational change that would facilitate the pest control effort: The Contractor shall describe site-specific solutions for observed sources of pest food, water, harborage and access.
- E. Commercial applicator or technician licenses: The Contractor shall provide a current list of names along with photocopies of the commercial applicator or technician's licenses for every Contractor employee who will be performing on-site services under this contract.

Record Keeping. The Contractor shall be responsible for maintaining a pest control logbook or file for each building or site specified in this contract. These records shall be kept on school district property (normally in the Principal's office or some other convenient site) and maintained on each visit by the Contractor. Each logbook shall contain the following items:

- A. Pest Control Plan: A copy of the Contractor's approved Pest Control Plan for that facility, including labels and MSDS sheets for all pesticides used in the building, brand names of all pest control devices and equipment used in the building and the Contractor's service schedule for the building.
- B. Service and Complaint Logs: A logbook for recording service visit activities, complaints from staff concerning pest sitings or pesticide applications. Forms should show times in and out and should be signed by the Contractor at each service visit.
- C. Service Report Forms: Customer copies of the Contractor's Service Report Form, documenting all information on pesticide applications, pest sightings, sanitation/environmental status and building maintenance needs.

In addition, copies of the above mentioned Service Report Forms should be forwarded by the Contractor to the IPM coordinator at least once a month by the Contractor.

Posting. The Contractor shall fulfill all obligations with regard to posting, as required by the Texas Structural Pest Control Board. The District will be responsible to post, in a prominent location, pest control signs provided by the Contractor in fulfillment of obligations under Texas laws and regulations. In the event of emergency applications, the District will display the pest control sign in a prominent location at the time of treatment.

Times of Service. The Contractor shall perform routine pest control services only during times when students are not expected to be present for normal academic activities for at least 12 hours after the application (*as defined under Article 135B-6 § 4J(e) of the Structural Pest Control Act and Title 22, Texas Administrative Code, §595.11*). In the event of a possible need for an emergency treatment, (*as defined by Title 22, Texas Administrative Code, §595.8 (d) and §595.11*) the Contractor shall work with the IPM coordinator to determine whether an emergency situation exists before applying any pesticides. In such cases pesticides may be applied only to the local area of infestation if students are present or if less than 12 hours will elapse before students are expected to be present. In the event of such an emergency treatment, the contractor will maintain records of the reasons for such treatments for the period prescribed by law.

Safety and Health. The Contractor shall observe all safety precautions throughout the performance of this contract and shall assume full responsibility and liability for compliance with all applicable regulations pertaining to the health and safety of personnel during the execution of work and shall hold the District harmless for any action on its part or that of its employees that results in illness, injury or death.

Uniforms and Protective Clothing. All Contractor personnel working in or around buildings designated under this contract shall wear distinctive uniform clothing. The Contractor shall determine and provide additional personal protective equipment required for the safe performance of work. Protective clothing, equipment and devices shall, as a minimum, conform to Occupational Safety and Health Administration (OSHA) standards for the products being used.

Vehicles. Vehicles used by the Contractor shall be identified in accordance with state and local regulations and shall be operated in a safe manner on District property. Vehicles must meet Texas Department of Transportation requirements.

Licensing. Throughout the term of this contract, the Contractor shall maintain a current business license issued by the Structural Pest Control Board. In addition, all Contractor personnel providing on-site pest control service must maintain licensing (in categories appropriate to the work being performed) as commercial applicators or licensed technicians. Unlicensed applicators will not be permitted to provide service to the District under this contract.

Complaints. Should at any time the District become dissatisfied with pest control service, the successful Contractor shall be notified in writing by the IPM coordinator regarding problems that occurred. The notice will detail the problems and site(s) which is experiencing the problems. The contractor will be required to contact the IPM coordinator to discuss possible solutions and the contractor will be given a date by which a written response with the proposed solutions must be submitted.

Pest Control Responsibilities

Structural Modifications and Recommendations. The Contractor shall be responsible for advising the IPM coordinator about any structural, sanitary or procedural modifications that would reduce pest food, water, harborage or access. The District will not hold the Contractor responsible for carrying out structural modifications as part of the pest control effort. However, minor applications of caulk and other sealing materials by the Contractor to eliminate pest harborage or access may be approved by the District on a case-by-case basis. The Contractor shall obtain the approval of the IPM coordinator prior to any application of sealing material or other structural modification.

Use of Pesticides. The Contractor shall be responsible for application of pesticides according to the label. All pesticides used by the Contractor must be registered with the U.S. Environmental Protection Agency (EPA) and by the State of Texas. Transport, handling and use of all pesticides shall be in strict accordance with the manufacturer's label instructions and all applicable Federal, state and local laws and regulations.

The Contractor shall adhere to the following rules for pesticide selection and use:

- A. Non-pesticide Products and Their Use: The Contractor shall use non-pesticidal methods of control wherever possible. For example:
 - ◆ Portable vacuums rather than pesticide sprays shall be used for initial clean-outs of cockroach infestations, for swarming (winged) ants and termites and for control of spiders in webs wherever appropriate.
 - ◆ Trapping devices rather than pesticide sprays shall be used for indoor fly control wherever appropriate.
- B. Application by Need: Pesticide application shall be according to need and not by schedule. As a general rule, application of pesticides in any inside or outside area shall not occur unless visual inspections or monitoring devices indicate the presence of pests in that specific area. Preventive pesticide treatment of areas where surveillance indicates a potential insect or rodent infestation, are acceptable on a case-by-case basis, as approved by the IPM coordinator.
- C. Pesticide Products and Their Use: When it is determined that a pesticide must be used in order to obtain adequate control, the Contractor shall employ the least hazardous material, most precise application technique and minimum quantity of pesticide necessary to achieve control.

When selecting pesticide products, highest priority shall be given to use of products on the Green and Yellow Lists, in that order, according to the criteria established in the most recent Structural Pest Control Board definitions of these products (*Title 22, Texas Administrative Code, § 595.12 f*).

Containerized and other types of crack and crevice-applied bait formulations, rather than sprays, shall be used for cockroach and ant control wherever appropriate. As a general rule, liquid aerosol or dust formulations shall be applied only as crack and crevice treatments with application devices specifically designed or modified for this purpose. "Crack and crevice treatment" is defined in this contract as an application of small amounts of insecticides into cracks and crevices in which insects hide or through which they may enter a building.

Application of pesticide liquid, aerosol or dust to exposed surfaces and pesticide space sprays (including fogs, mists and ultra-low volume applications), shall be restricted to unique situations where no alternative measures are practical.

The Contractor shall obtain the approval of the IPM coordinator prior to any application of pesticide liquid, aerosol or dust to exposed surfaces or any space spray treatment. The Contractor shall take all necessary precautions to ensure student and staff safety and all necessary steps to ensure the containment of the pesticide to the site of application.

- D. Pesticide Storage/Disposal: The Contractor shall not store or dispose of, any pesticide product on District property.
- E. Pesticide Sales and Distribution: The Contractor shall not sell, share or make available any pesticide products to any non-licensed District employee.

Rodent Control. As a general rule, rodent control inside occupied buildings shall be accomplished with trapping devices. All such devices shall be concealed out of the general view and in protected areas so as not to be affected by routine cleaning and other operations. Trapping devices shall be checked on a schedule approved by the IPM coordinator. Trapping shall not be performed during periods when maintenance will be delayed by holidays, weekends, etc. The Contractor shall be responsible for disposing of all trapped rodents and all rodent carcasses in an appropriate and timely manner.

In circumstances when rodenticides are deemed essential for adequate rodent control inside occupied buildings, the Contractor shall obtain the approval of the IPM coordinator prior to making any interior rodenticide treatment. All rodenticides, regardless of packaging, shall be placed either in locations inaccessible to children, pets, wildlife and domestic animals--or in EPA-approved, tamper-resistant bait boxes. As a general rule, rodenticide application outside buildings shall emphasize the direct treatment of rodent burrows, wherever feasible.

Frequency of bait box servicing shall depend upon the level of rodent infestation. All bait boxes shall be maintained in accordance with EPA regulations, with an emphasis on the safety of non-target organisms. The Contractor shall adhere to the following rules:

- ◆ All bait boxes shall be placed out of the general view, in locations where they will not be disturbed by routine operations.
- ◆ The lids of all bait boxes shall be securely locked or fastened shut.
- ◆ All bait boxes shall be securely attached or anchored to the floor, ground, wall or other surface, so that the box cannot be picked up or moved.
- ◆ Bait shall always be placed in the baffle-protected feeding chamber of the box and never in the runway of the box.
- ◆ All bait boxes shall be labeled with the Contractor's business name and address and dated by the Contractor's technician at the time of installation and at each servicing.

Program Evaluation. The District will continually evaluate the progress of this contract in terms of effectiveness and safety and will require such changes as are necessary. The Contractor shall take prompt action to correct all identified deficiencies.

Quality Control Program. The Contractor shall establish a complete quality control program to assure the requirements of the contract are provided as specified. Within ____ (5) working days prior to the starting date of the contract, the Contractor shall submit a copy of his program to the District. The program shall include the following items:

- A. Inspection System: The Contractor shall develop a system for monitoring the effectiveness of the services provided to the District. The purpose of this system is to detect and correct deficiencies in

the quality of services before the level of performance becomes unacceptable and/or District or health department inspectors identify the deficiencies.

- B. **Quality Control Checklist:** A quality control checklist shall be used in evaluating contract performance during regularly scheduled and unscheduled inspections. The checklist shall include all buildings or sites serviced by the Contractor as well as every task required to be performed.
- C. **Quality Control File:** A quality control file shall contain a record of all inspections conducted by the Contractor and any corrective actions taken. The file shall be maintained throughout the term of the contract and made available to the District upon request.
- D. **Inspectors:** The Contractor shall state the name(s) of the individual(s) responsible for performing the quality control inspections.

Attachments should include list of schools/sites for which pest control services are to be performed, plus a copy of the District's IPM Policy.

List of Sites/Schools to be Treated

SITES/FACILITIES	Est. minimum service time (hours)	Amount per quarter	Amount annually
Senior High Schools:			
_____	_____	_____	_____
_____	_____	_____	_____
Junior High Schools:			
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
Elementary Schools:			
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
Other Sites/Facilities:			
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
TOTAL COST		_____	_____

Percent of escalation anticipated, if any: _____%

TERMITE SERVICE: Average cost per linear foot to service total building for termites.

\$ _____ / linear foot for..... 0 - 1,000 ft.
 \$ _____ / linear foot for.... 1,001 - 6,000 ft.
 \$ _____ / linear foot for... 6,001 - 15,000 ft.
 \$ _____ / linear foot for... 15,001 - 30,000 ft.
 \$ _____ / linear foot for... 30,001 +

TERMITE SERVICE RENEWAL FEE:

_____ % of cost to treat building (Applies only if entire building is initially treated).

ADDITIONAL SERVICES: \$ _____ / hour for other services that may become necessary

CONSULTING SERVICES: \$ _____ / hour

Weighted Factor Rating System for Evaluating Pest Control Bids

The bidding system sometimes results in contracts being awarded to companies with lower performance standards. Price should not be the only factor when judging bids from competing pest control firms. Many schools and businesses address this problem by using some form of a weighted factor rating system. The weighted factor rating system is a relatively objective method for evaluating bidders on several criteria. The following factors and weights are provided as suggestions for schools that choose to use such a system to evaluate bids. The factors and weights can be modified by your school district according to your own priorities and preferences.

How it Works

On the next page you will find a sample of a completed weighted factor rating form. In this example, supplier B has the highest rating and would be awarded the contract even though overall price rating was lower than ratings for supplier A.

Ratings within the various categories might be informal, based on the contract officer's subjective assessment of a bidder's qualifications compared to other bidders. Alternatively, the ratings might be based on a predetermined, objective set of scoring criteria (e.g., giving a bidder a point for each desired component of a program that they demonstrate).

Similarly, bid prices can be objectively compared in the following way. Suppose companies A, B and C bid \$5,000, \$5,800 and \$6,000, respectively, for a one-year pest control contract. Because \$5,000 was the lowest bid, it serves as a benchmark to rate the other two bids. Supplier B's bid of \$5,800 is 16% higher; hence its rating would be 16% lower than the top rating of 30 listed in the sample rating system. Similarly, supplier C's bid of \$6,000 is 20% higher than supplier A's bid; hence its rating would be 20% less than a top rating of 30. Other methods for rating bids can be devised with equal merit.

Sample
**Weighted Factor Rating Form
for Evaluating Pest Control Bids**

FACTORS	MAXIMUM RATING (weights)	SUPPLIER		
		A	B	C
<u>Technical Factors:</u>				
Familiarity/experience with IPM	10	<u>7</u>	<u>10</u>	<u>7</u>
Technician experience/training	10	<u>7</u>	<u>10</u>	<u>7</u>
Previous experience in schools	10	<u>8</u>	<u>10</u>	<u>0</u>
Access to Board Certified Entomologist	5	<u>5</u>	<u>5</u>	<u>5</u>
<u>Price Factors:</u>				
Realistic time/pricing estimates	15	<u>14</u>	<u>15</u>	<u>15</u>
Price	30	<u>30</u>	<u>25</u>	<u>24</u>
<u>Other Factors:</u>				
Manpower resources	5	<u>3</u>	<u>5</u>	<u>5</u>
Ability to respond to emergency requests/calls for service	5	<u>3</u>	<u>5</u>	<u>5</u>
Managerial, financial capabilities	5	<u>3</u>	<u>5</u>	<u>3</u>
Quality control program	5	<u>4</u>	<u>5</u>	<u>4</u>
TOTAL SCORE		<u>84</u>	<u>95</u>	<u>75</u>

Price should not be the only factor when judging bids from competing pest control firms. This weighted factor rating form can be used to help evaluate each bidder on several criteria. The above factors and weights can be modified by each school district according to its individual priorities.

[Blank Page in Original Bulletin]

Summary of Options for Noncommercial Pesticide Applicator Certification

Texas law requires that anyone who applies pesticides in or around schools be licensed by the Texas Structural Pest Control Board. This includes persons who apply pesticides that can be purchased over-the-counter as well as products that are normally sold only to pest control operators.

Recent changes to the laws governing pest control applications allow school employees who are not licensed as commercial applicators to become licensed as noncommercial applicators. This section describes the various licensing options for prospective noncommercial applicators.

Texas law provides two ways to become licensed to apply pesticides in noncommercial settings (e.g., public schools, city grounds, public housing complexes, etc.). The first option is to become a noncommercial applicator. A second, less known option is to become a noncommercial technician-apprentice and then work toward becoming a noncommercial technician. A noncommercial technician may apply pesticides, much like a noncommercial applicator, but cannot supervise other technicians. Unlike noncommercial applicators, technicians are not subject to continuing education requirements. The two license categories and their relative advantages and disadvantages are described below.

Noncommercial Applicator

According to the Texas Structural Pest Control Act, a person who wishes to conduct pest control or apply pesticides as part of his or her employment may be licensed as a *noncommercial* certified applicator if that person is a government employee or works for an apartment building, day-care center, hospital, nursing home, hotel or motel, lodge, warehouse, food-processing establishment or educational institution. Steps in obtaining the license are:

1. Submit an application to become a noncommercial applicator with the Texas Structural Pest Control Board. Note that there are some insurance requirements and minimum qualifications relating to age and criminal background that accompany application.
2. Purchase the necessary training manuals. You may photocopy the order form provided in the Appendix.

Appropriate Extension publications for most school, government and public housing employees will include the:

- ◆ B-5073 General Manual
- ◆ B-5074 Pest Control Manual
- ◆ B-5066 Ornamental and Turf Pest Control Manual

Each license applicant must be familiar with the General Manual, but depending on the employee's job duties, he/she may only need to study one or two of the other two manuals.

3. Meet the experience qualifications needed for taking the exam. The applicant must meet at least *one* of the following three requirements:
 - ◆ Proof of previous employment or experience in the pest control industry or related field experience for 12 of the previous 24 months.
 - ◆ A degree in the biological sciences from an accredited college or university.
 - ◆ Proof of attending a Board-approved training course (for times and locations of courses, contact the Structural Pest Control Board).
4. Pay an examination fee (minimum \$60) and pass a general certified applicator exam plus an exam in at least one category. Most noncommercial applicators will take one or more of the following exams: Pest Control, Weed Control or Lawn and Ornamental(exam fees increase \$30 for each additional category beyond the first category).
5. After passing the exam, the applicant must pay an annual license fee (\$66 every 12 months).

Advantages of a noncommercial applicator license:

- ◆ Because of the option to take the exam following a Board-approved training course, this is the fastest option for most new applicators or for people with previous experience in pest control. Commonly, training courses are now held in conjunction with testing dates (e.g., a training program is held the day before the exam).
- ◆ Permits the licensee to supervise noncommercial technicians and technician apprentices.

Disadvantages of a noncommercial applicator license:

- ◆ More expensive than a technician's license.
- ◆ Test is more rigorous than that for a technician's license.
- ◆ Attendance in continuing education programs is required each year that a license is held.

Noncommercial Technician

A second way to apply pesticides for noncommercial purposes is to obtain a noncommercial technician's license. Before becoming a technician, a person must work as an applicant. After the 12 month apprentice period is completed, the technician-apprentice may take the exams to become a full-fledged technician. Technician-apprentices must have contact with a licensed applicator (e.g., a noncommercial applicator) at least three times a week. Steps in becoming a technician apprentice are:

1. Submit an application to become a noncommercial technician-apprentice applicant with the Texas Structural Pest Control Board. Once the application is approved, the technician-apprentice applicant may begin on-the-job training, which can include supervised pesticide applications.
2. The applicant must complete 60 hours of on-the-job training in each category under the supervision of a certified applicator, 22 hours of classroom training in general standards and 10 hours of classroom training in the subject matter category in which he/she will be licensed (e.g., Pest Control, Lawn and Ornamentals, Weeds). Classroom training can be accomplished via materials or lessons provided by the certified applicator supervisor or through attending training through the Extension Service or a Junior College that offers such classes. Applicant must be able to verify the training via letter, diploma or certificate from the trainer.
3. Once the training hours are completed, a certification of training form must be submitted verifying that the training has been completed. The Structural Pest Control Board will then issue a technician apprentice license.

4. After completing the training, the applicant must pay an examination fee (minimum \$60) and take the noncommercial technician test.
5. Upon successfully completing the exam, the applicant must pay an annual license fee (\$36 each 12 months).
6. Technician apprentices have 12 months in which to pass the technician exam. If the test is not passed within that period, he/she reverts back to applicant status for at least six months, then the process begins again.

Advantages of a noncommercial technician's license:

- ◆ Less expensive than becoming a noncommercial certified applicator.
- ◆ There is no wait for a local training and exam date before beginning to apply pesticides. Applicant can begin on-the-job training under the supervision of a noncommercial certified applicator as soon as the Structural Pest Control Board acknowledges acceptance of the application.
- ◆ Test is less rigorous than that required for certified applicators.
- ◆ Currently there are no continuing education requirements for technicians.
- ◆ Technicians can supervise technician-apprentices.

Disadvantages of a noncommercial technician license:

- ◆ Requires supervision and direct contact with a noncommercial applicator at least three times a week during the apprentice period.
- ◆ Requires an apprentice period with fairly rigorous training requirements. Supervisors must ensure that apprentice receives 92 hours of training (60 hours on-the-job and 32 hours classroom training).

For up-to-date information on exam fees, insurance requirements, Board-approved training course dates and places and other information about becoming a noncommercial applicator, contact the Structural Pest Control Board, 9101 FM 1325, Suite 201, Austin, Texas 78758 (FAX: 512-837-7722).

This summary is designed to provide authoritative information regarding noncommercial applicator licensing. It is provided with the understanding that the Texas Agricultural Extension Service is not engaged in rendering legal, accounting or other professional services.

[Blank Page in Original Bulletin]

1
2

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
---	---	---	---	---	---	---	---	---	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	-----

Law Pertaining to IPM for Schools

A summary provided by the Structural Pest Control Board

Article 135 B-6 of the Texas Revised Civil Statutes

Section 4B

Certified Noncommercial Applicators; Licensure; Scope of Employment

- (b) An individual must be licensed as a certified noncommercial applicator or technician if the individual is not licensed as a certified commercial applicator and the individual:
 - (1) is an employee of the state or a political subdivision of the state and engages in the business of structural pest control other than applying a general use pesticide in an incidental use situation; or
 - (2) is an employee of a person who owns, operates, or maintains a building, the individual engages in the business of structural pest control, and the building is an apartment building; day-care center; hospital; nursing home; hotel; motel; lodge; warehouse; food-processing establishment, other than a restaurant, retail food, or food service establishment; school or educational institution.
- (c) An individual licensed as a certified noncommercial applicator or technician may not engage in the business of structural pest control outside the scope of the employment for which the individual has been licensed as a certified noncommercial applicator or technician unless the individual becomes licensed as otherwise provided by this Act.
- (d) An owner of a building that is an apartment building; day-care center; hospital; nursing home; hotel; motel; lodge; warehouse; food-processing establishment, other than a restaurant, retail food, or food service establishment; school or educational institution, may obtain pest control services from a person only by:
 - (1) contracting with a business that has a structural pest control business license; or
 - (2) requiring an employee of the owner, who is licensed as a certified noncommercial applicator or technician, to perform the services.
- (e) The board shall develop standards and criteria for licensing an individual as a certified noncommercial applicator as provided by this section.
- (f) An individual licensed as a certified noncommercial applicator or technician may engage in the business of structural pest control as provided by this section without association with a business that has been issued a structural pest control business license. The board may adopt insurance requirements for certified noncommercial applicators or technicians.

Section 4G
**Pest Control Information Sheets
and Signs for Indoor Treatments;
Notice of Treatment**

- (f) For an indoor treatment at a building that is a hospital, nursing home, hotel, motel, lodge, warehouse, food-processing establishment, school or educational institution, or day-care center, the certified applicator or technician shall supply the pest control information sheet and a pest control sign to the chief administrator or building manager. The chief administrator or building manager shall notify the individuals who work in the building of the treatment by:
 - (1) posting the sign in an area of common access that the individuals are likely to check on a regular basis at least 48 hours before each planned treatment; and
 - (2) providing the information sheet to any individual working in the building on request of the individual.
- (g) Personnel at a school or educational institution or a day-care center are required to inform the parents, guardians, or managing conservators of the children attending the school or day-care center, at the time the child is registered, that:
 - (1) the school, institution, or center periodically applies pesticides indoors; and
 - (2) information on the application of the pesticides is available at the request of the parents, guardians, or managing conservators.
- (h) The board shall develop a policy to implement and enforce this section.
- (i) A requirement under this section that notice of a treatment be given at least 48 hours before the treatment may be waived for emergency treatments under rules adopted by the board.
- (j) A person may not be considered in violation of this section or a rule adopted by the board under this section for not posting a pest control sign if the sign is posted as required by this section or rule adopted under this section but is removed by an unauthorized person.
- (k) For the purposes of this section, a treatment is an indoor treatment even though the treatment may include an outside perimeter treatment of the building if the primary purpose of the treatment is to treat the inside of the building. The board shall define a perimeter treatment in rules and shall adopt the definitions provided in federal law.
 - (1) The signage, advance notice, and information sheet requirements of this section do not apply to space that is vacant, unused, and unoccupied as a dwelling, workplace, or other use covered by this section.

Section 4J
Integrated Pest Management School Program

- (a) The board shall establish standards for an integrated pest management program for the use of pesticides, herbicides, and other chemical agents to control pests, rodents, insects, and weeds at the school buildings and other facilities of school districts.

- (b) Each school district shall, on or before September 1, 1995, adopt an integrated pest management program that incorporates the standards developed by the board.
- (c) The board shall use an existing advisory committee or create a new advisory committee to assist the board in developing the standards for the integrated pest management program. In developing the standards, the advisory committee shall consult with a person knowledgeable in the area of integrated pest management in schools.
- (d) The board shall include in standard adopted under this section.
 - (1) A requirement that the least toxic methods available to control pests, rodents, insects, and weeds be used; and
 - (2) A list of products that a school district is allowed to use in its applications.
- (e) The board shall require that a pesticide may be applied to a school building or on grounds only during periods in which students are not expected to be present for normal academic instruction or organized extracurricular activities for at least 12 hours after the application.

Section 10B Administrative Penalty

- (a) If a person violates this Act or a Rule or order adopted by the board, the board may assess an administrative penalty against the person as provided by this section.
- (b) The penalty may be in an amount not to exceed \$5,000 a day for each violation. Each day a violation continues or occurs may be considered a separate violation for purposes of penalty assessments.

Title 22, Texas Administrative Code

Section 593.1 Persons Required to Secure License

- (c) **Certified Noncommercial Applicator.** The person who as an employee is responsible for providing pest control services to a governmental entity, apartment building, day-care center, hospital, nursing home, hotel, motel, lodge, warehouse, food processing establishment, school or educational institution. The person performing the actual inspection and/or application must be a licensed certified noncommercial applicator.
- (d) **Technician.** Individuals who perform pest control services under the direct supervision of a certified applicator must obtain a technician license by meeting the standards prescribed by the board in Sec. 593.21 of this title (relating to Technician License Standards). A technician must be licensed for every business or noncommercial entity for which he is employed.
- (e) **Technician-apprentice.** Individuals who perform pest control services under the direct supervision of a certified commercial applicator must obtain a technician-apprentice license prior to obtaining a technician license.

Section 595.6
Pest Control Sign

- (a) A pest control sign must be provided by the licensee to the owner or manager at least 48 hours prior to a planned indoor treatment at a residential rental property with five or more rental units.
- (b) A pest control sign must be provided by the licensee to the employer or building manager at least 48 hours prior to a planned indoor treatment at a workplace. A workplace is defined as any non-residence with three or more full-time paid employees which is treated by a licensed business or a certified noncommercial applicator.

Section 595.7
Consumer Information Sheet

- (a) For indoor treatments, the Board-approved Consumer Information Sheet, a statement listing the pesticide(s) used and upon request a label for any pesticide(s) used shall be distributed by the licensee as follows:
 - (4) to employers, managers or administrators of workplaces, hospitals, nursing homes, hotels, motels, lodges, warehouses, food-processing establishments, school or educational institutions, or day-care centers at least 48 hours prior to a planned treatment. A workplace is defined as any non-residence with three or more full-time paid employees which is treated by a licensed business or a certified noncommercial applicator.
- (c) The official Structural Pest Control Board Consumer Information Sheet must be used. Copies of the Consumer Information Sheet are available from the Board in English and Spanish and shall read as follows:

Consumer Information

(Required by the Texas Structural Pest Control Board)

The structural pest control industry is regulated by the Texas Structural Pest Control Board located at 9101 FM 1325, Suite 201, Austin, Texas 78758. The Board licenses the businesses, certified applicators and technicians who perform structural pest control work. If a pest control service is used, all work is supervised by a licensed certified commercial applicator. Otherwise, a certified noncommercial applicator must perform the service. Certified applicators and technicians must pass a written examination in order to receive their licenses.

Pesticides must be registered with the United States Environmental Protection Agency and the Texas Department of Agriculture before they may be used in Texas.

Pesticides are designed to control or repel pests. Your risk of harm depends upon the degree of your exposure to a particular pesticide.

Specific health and safety information varies between pesticides and types of exposures and is available on the label information or MSDS sheet which can be supplied to you upon request from the licensed applicator. Take normal precautions when a treatment has been performed. Pesticides may be harmful if swallowed, inhaled, or absorbed through the skin. Avoid breathing dust or spray mist and any unnecessary contact with treated surfaces. If you desire specific information

on precautions, refer to the pesticide label. The law requires that the application procedures specified on the label be followed.

In order to minimize the reliance on pesticides and reduce pest populations, you may wish to consider the sanitation or physical alteration of your workplace or residence. Landscaping, lighting, physical exclusion and biological controls can affect the pest populations. Alternatives may include fixing leaking pipes or eliminating soil/wood contact. Your pest control operator may offer these services upon request. A proper inspection should provide the necessary information to choose the method of pest control which best suits your situation.

If you have questions about the application, contact the certified applicator. If you suspect a violation of the law regarding structural pest control, contact the Structural Pest Control Board.

In case of a health emergency, seek immediate medical attention.

Pest control signs must be posted prior to treatment in many instances. The signs should be posted in an area of common access at least 48 hours prior to treatment. The information on the sign will allow you to contact someone who can tell you what pesticide is being used.

If you are contracting for pest control services due to a home solicitation, you have the right to cancel the contract within 72 hours. You may exercise this right by notifying the pest control company prior to receiving service that you do not wish to receive their service.

- For general information on pesticides, contact the National Pesticide Telecommunications Network at 1-800-858-7378.
- For information concerning structural pest control laws, contact: Structural Pest Control Board (512)835-4066.
- For information concerning the formulation and registration of pesticides, contact: Texas Department of Agriculture (512)463-7476.
- For non-emergency health information relating to pesticides, contact: Texas Department of Health (512)458-7111.

- (d) The pre-notification requirements of subsections (a)(3) and (4) are waived if the customer and certified applicator sign a statement attesting to the fact that an emergency exists which requires immediate treatment. If such an emergency exists the Consumer Information Sheet should be provided by the licensee at the time of treatment. The statement must be kept on file with the pest control use records at the business license location. Certified noncommercial applicators may attest to an emergency by signing a statement attesting to the emergency and must keep the statement on file with the pest control use records at their place of employment. If the customer is not available to sign a statement at the time of treatment, the customer's name and telephone number shall be noted in the pest control use records. An emergency is defined as an imminent hazard to health or property or an imminent infestation and emergency treatment is limited to the localized area of the emergency.

Section 595.8

Responsibilities of Unlicensed Persons for Posting and Notification

- (b) Employers, building managers and chief administrators of workplaces, hospitals, nursing homes, hotels, motels, lodges, warehouses, food-processing establishments, school or educational

institutions, and day-care centers shall post a pest control sign in an area of common access at least 48 hours prior to each planned treatment and provide a Consumer Information Sheet to any individual working in the building at the request of that individual. Area of common access means a common area that an individual is likely to check on a regular basis, such as building entranceway, mailboxes, laundry rooms, beverage machines, building bulletin boards, etc.

- (c) Chief administrators of school or educational institutions and day-care centers shall notify the parents or guardians of children attending the facility in writing that pesticides are periodically applied indoors and that information on the times and types of applications is available upon request. Such notification must be made at the time of the child's registration.
- (d) The 48-hour pre-notification requirements of subsections (a) and (b) may be met at the time of treatment if an emergency exists and the customer and certified applicator sign a statement attesting to the fact that an emergency exists that requires immediate treatment. The statement must be kept on file with the pest control use records at the business license location. Certified noncommercial applicators may attest to an emergency by signing a statement attesting to the emergency and must keep the statement on file with the pest control use records at their place of employment. If the customer is not available to sign a statement at the time of treatment, the customer's name and telephone number shall be noted in the pest control use records. An emergency is defined as an imminent hazard to health or property or an imminent infestation and emergency treatment is limited to the localized area of the emergency.
- (e) A person may not be considered in violation of this section if a pest control sign is removed by an unauthorized person or if the space to be treated is vacant, unused and unoccupied at the time of treatment.
- (f) A person found in violation of this section is subject to the administrative penalty provisions of the Structural Pest Control Act, Section 10B.

Section 595.11 Schools

- (a) Pesticide applications shall not be made to an area within or outside a school building if students are expected to be present in the area treated within the next 12-hour period immediately following treatment. Emergency treatments will be permitted in the localized area of infestation when there is an imminent threat to health or property or an infestation is imminent. Records of the reasons for emergency treatments shall be kept in the pest control use records of the business or certified noncommercial applicator performing the treatment.
- (b) Each school district shall develop a written pest management policy for all structural pest control activities conducted on school property based on the most current Structural Pest Control Board IPM document. The pest management policy must be adopted by the school board and kept on file by the district superintendent and IPM coordinator. The policy shall be based on generally accepted tenets of integrated pest management, as defined by the Environmental Protection Agency. Such tenets include, but are not limited to:

- (1) strategies that rely on the best combination of pest management tactics that are compatible with human health and environmental protection;
 - (2) proper identification of pest problems;
 - (3) monitoring programs to determine when pests are present or when pest problems are severe enough to justify corrective action;
 - (4) use of non-chemical management strategies whenever practical; and
 - (5) preferential use of least-toxic chemical controls when pesticides are needed.
- (c) Each school district shall designate IPM coordinator(s) on or before September 1, 1995. The person(s) so designated shall attend a Structural Pest Control Board approved IPM coordinator training course within twelve (12) months of designation as IPM coordinator. The IPM coordinator(s) shall oversee and be responsible for:
- (1) Assisting in the coordination of pest management personnel, ensuring that all school employees who perform pest control have the necessary training, are equipped with the appropriate personal protective equipment, and have the necessary licenses for their pest management responsibilities;
 - (2) Maintaining a prioritized list of needed structural and landscape improvements;
 - (3) For school districts that opt to conduct some or all pest management work through independent contractors, working with district administrators to ensure that pest control contract bid specifications are compatible with IPM principles, and that pest control contractors work under the guidelines of the district's IPM policy;
 - (4) Ensuring that all pesticides used on school district property are in compliance with the school district's policies.
 - (5) Authorizing least hazardous, effective emergency treatments with the approval of the certified applicator as provided for under Sections 595.6(d), 595.7(d), 595.8(d) and this section of the SPCB regulations;
 - (6) Handling requests and inquiries relating to pest problems, and maintain records of any pesticide-related complaints;
 - (7) Maintaining files of pesticide application records, pesticide labels, and Material Safety Data Sheets (MSDS);
 - (8) Informing school district administrators and other personnel about IPM requirements (e.g., training requirements, pre-notification and posting requirements, sanitation, and pesticide storage).
- (d) Each school district shall employ or contract with a certified applicator, who may, if an employee, also be the IPM coordinator. The certified applicator shall:
- (1) Oversee day-to-day pest management needs of the district;
 - (2) Provide written approval/justification for use of products on the Yellow List;
 - (3) Handle and forward records of any complaints relating to pest problems, IPM activities, or pesticides to the IPM coordinator;
 - (4) Ensure that proper pesticide application records are maintained;
 - (5) Participate in IPM training courses approved for school IPM personnel by the SPCB.
 - (6) Consult with the IPM coordinator concerning use of products not on the Green or Yellow List.
 - (7) Authorize emergency treatments as provided for (See c(5)).
- (e) Licensed technicians must obtain written approval from the certified applicator to apply Yellow or Red List products.

(f) Pesticides approved for use on school property are classified as follows:

- (1) Green List - All products must be EPA category III and IV Pesticides and any of the following: Inorganic pesticides (i.e., boric acid, silica gels, diatomaceous earth, disodium octoborate tetrahydrate); Insect growth regulators; Insect and rodent baits in tamper-resistant containers or for crack and crevice-placement only; Microbe or fungus-based insecticides; Botanical insecticides, other than synthetic pyrethroids, containing not more than 5% synergists; Biological (living) control agents. Green List products may be used at the discretion of the licensee.
- (2) Yellow List - All EPA Category III and IV pesticides (i.e., products carrying a CAUTION signal word) not included in the Green List. Use of Yellow List Products requires written approval from the certified applicator. A copy of the approval must be sent to the IPM coordinator. Yellow list approvals shall have a duration no longer than three months or three applications per site, whichever occurs first.
- (3) Red List - Category I and II pesticides (i.e., products carrying a WARNING or DANGER signal word) or restricted use pesticides or state-limited use pesticides as defined under the Federal Insecticide, Fungicide, and Rodenticide Act and/or the Texas Agriculture Code. Use of Red List products require written approval from the certified applicator and IPM coordinator. A copy of the approval must be sent to the Texas Structural Pest Control Board no later than fourteen (14) days after the application. Red List approvals shall have a duration no longer than three months or three applications per site, whichever is first.

- (g) Written approvals for use of Yellow and Red List products shall be made on a form developed by the Structural Pest Control board. The approvals shall include a description of the problem and justification for use of the yellow or red list product. Approvals shall be kept by the IPM coordinator of the district for a minimum of two years.
- (h) All contracts for pest control services executed on or after the effective date of this regulation must be consistent with the school district's written pest management policy.
- (i) Any person found not in compliance with the Act or this Section is subject to administrative penalties under Section IOB. Such persons may include the school district or certified commercial applicator.

Section 597.1

Grounds for Revocation, Suspension, Penalties, Reprimanding, Refusal to Examine, Refusal to Issue or Renewal Licenses

Any such action may be accomplished by a vote of the board, after notice and hearings, as provided for by Texas Civil Statutes, Article 135b-6, and the Administrative Procedure and Texas Register Act. No revocation, suspension, annulment, or withdrawal of any license is effective unless prior to the institution of agency proceedings, the agency gave notice by personal service or by registered or certified mail to the licensee of facts or conduct alleged to warrant the intended action, and the licensee was given an opportunity to show compliance with all requirements of law for the retention of the license.

Answers to Common Questions about IPM

These are some of the most commonly asked questions received by the Structural Pest Control Board. Responses have been adapted by the Extension Service from original answers supplied by the SPCB.

1. *Do state IPM regulations apply to private schools and church schools?*

The Texas IPM regulatory program applies only to public school districts (K-12). However, private and parochial schools accredited by the State Board of Education must either meet noncommercial applicator licensing requirements or contract their pest control work to a licensed commercial business.

2. *Where can schools find samples or guidelines to follow when developing a district IPM policy?*

There is no single standard policy statement for IPM. You will find model policy statements in this manual and in both EPA and Texas Structural Pest Control Board versions of the booklet, "Pest Control in the School Environment: Adopting Integrated Pest Management."

3. *Must this IPM policy be filed with the Texas Structural Pest Control Board (SPCB)?*

The policy should be kept on file by the district superintendent and IPM coordinator. You are not required to submit a copy of the policy to the SPCB.

4. *What qualifications are required of an IPM coordinator?*

The person(s) designated as the IPM coordinator(s) shall attend a SPCB-approved IPM coordinator training course within 12 months of designation as IPM coordinator. Each school district shall designate the coordinator on or before September 1, 1995. The IPM coordinator's responsibilities are outlined under the section titled "Roles of School Employees in an IPM Program" in this manual.

5. *Will most average to large school districts employ a full time individual as an IPM coordinator?*

This decision can be made by individual school districts; a separate position is not required.

6. *Can one person be an IPM coordinator for several schools or smaller districts?*

One person may be the IPM coordinator for a number of schools or smaller districts if the person is on the payroll of all involved districts. However, the school districts should notify the Structural Pest Control Board about who the individual is and which schools are combining their IPM coordinator services.

7. *At this time, what does the average school district have for pest management personnel?*

We do not have access to this information at this time.

8. *How many school districts already have certified applicators as employees?*

Individual school districts may either have their own certified applicators or contract the pest control work out to commercial pest control companies. Specific statistics on numbers of applicators per school district is not available.

9. *In what different categories should the average school pesticide applicator be certified?*

Certified applicators may be licensed by the Structural Pest Control Board in any of the following categories available: pest control, termite control, lawn and ornamental, structural fumigation, commodity fumigation, weed control and wood preservation. The most typical licensing categories for school employees are pest control (indoor pest control), lawn and ornamental and weed control.

10. *Have pesticide lists been developed for the Green List, Yellow List and Red List?*

The SPCB does not maintain lists of products within the various categories because the list would be too long and would constantly change as new products are added to, or removed from, the market. Rather, the board provides guidelines that allow you to determine the classification of any pesticide. In general, pesticides with CAUTION signal words¹ are classified as Yellow List products. Products with WARNING or DANGER signal words fall into the Red List. Certain *insecticides* with CAUTION signal words¹ may be classified as Green List products. Please refer to Section 3, "Pesticide Product Approval Process for Texas Public Schools," in this manual for a more complete description of which pesticides are classified as Green List products. Currently no herbicides or fungicides are classified as Green List pesticides.

11. *What is the penalty for a school that fails to comply with IPM regulations?*

A penalty of \$5,000 could be assessed for each violation of the Structural Pest Control Act.

12. *Who can be penalized?*

Any persons responsible for illegal pesticide applications and/or the school superintendents.

13. *What other states already have similar school regulations in place?*

The SPCB is in the process of sending out surveys to determine which states have passed or are likely to pass IPM regulations for schools.

14. *What additional sources of information are available concerning school IPM policies and programs?*

A publication entitled, *Pest Control in the School Environment: Adopting Integrated Pest Control Management*, is available from the Texas Structural Pest Control Board. Technical information and references about pests and IPM are available through the Texas Agricultural Extension Service or the Texas Pest Control Association. See the Appendix for contact information.

¹ A signal word is a precautionary term required by federal law on the front panel of every pesticide label. Signal words are printed in bold letters and include (in order of increasing toxicity) CAUTION, WARNING and DANGER.

Appendix

Useful Forms and Resources for IPM Coordinators

[Blank Page in Original Bulletin]

Pesticide Approval Form*
For Use of Yellow or Red List Products
_____ Independent School District

CHEMICAL REQUESTED

Common name: _____ Trade name: _____

Formulation: _____

Signal word (check one): ☐ CAUTION (Yellow List) ☐ WARNING (Red List) ☐ DANGER (Red List)

Rate/Concentration to be used: _____

Estimated amount concentrate to be used: _____

SITE TO BE TREATED

School/facility name: _____

Description of treatment site: _____

Plants to be treated (if applicable): _____

Size of treatment area (outdoor applications): _____

PEST PROBLEM

Primary pest to be controlled: _____ Other pests: _____

Action threshold available? ☐ YES ☐ NO

Has pest population reached the action threshold? ☐ YES ☐ NO

Monitoring methods used (check all that apply):

☐ visual inspection ☐ traps - type:

☐ Other - describe:

Damage observed:

JUSTIFICATION

Nonchemical procedures and Green List products considered or used prior to request:

Justification for request:

Requested by: _____ Date: _____

Approved by:
Certified Applicator _____ Date: _____

For Red List Products
IPM coordinator _____ Date: _____

** Please see note on back of form.*

This form is designed to request public school use of a pesticide product that is not classified as a Green List product. For more information about interpreting pesticide labels, refer to Section 4 of this manual; for help in identifying Green List products, see Section 3.

Approval for pesticides listed on this form will be good for up to 3 months or 3 applications, whichever occurs first. Approval is only for the sites listed on this form. When approving use of Red List products, send a copy of this form to the Structural Pest Control Board at the address listed below.

Texas Structural Pest Control Board
P.O. Box 9536-172
Austin, Texas 78766

This sheet is referred to in the Notice of Pest Control Treatment explained in Section 7 of this manual. A copy should be available through the IPM Coordinator and through every building manager or principal's office in schools where pesticides are applied. This sheet shall be made available to students, staff, parents or others upon request (cf. Texas Revised Civil Statutes Article 135B-6, Sec. 4G; Title 22, Texas Administrative Code, Sec. 595.7).

Consumer Information Sheet

The structural pest control industry is regulated by the Texas Structural Pest Control Board located at 9101 FM 1325, Suite 201, Austin, Texas 78758-5280. The Board licenses the businesses, certified applicators and technicians who perform structural pest control work. If a pest control service is used, all work is supervised by a licensed certified commercial applicator. Otherwise, a certified noncommercial applicator must perform the service. Certified applicators and technicians must pass a written examination in order to receive their licenses.

Pesticides must be registered with the United States Environmental Protection Agency and the Texas Department of Agriculture before they may be used in Texas.

Pesticides are designed to control or repel pests. Your risk of harm depends upon the degree of your exposure to a particular pesticide.

Specific health and safety information varies between pesticides and types of exposures and is available on the label information or MSDS sheet which can be supplied to you upon request from the licensed applicator. Take normal precautions when a treatment has been performed. Pesticides may be harmful if swallowed, inhaled, or absorbed through the skin. Avoid breathing dust or spray mist and any unnecessary contact with treated surfaces. If you desire specific information on precautions, refer to the pesticide label. The law requires that the application procedures specified on the label be followed.

In order to minimize the reliance on pesticides and reduce pest populations, you may wish to consider the sanitation or physical alteration of your workplace or residence. Landscaping, lighting, physical exclusion and biological controls can affect the pest populations. Alternatives may include fixing leaking pipes or eliminating soil/wood contact. Your pest control operator may offer these services upon request. A proper inspection should provide the necessary information to choose the method of pest control which best suits your situation.

If you have questions about the application, contact the certified applicator. If you suspect a violation of the law regarding structural pest control, contact the Structural Pest Control Board.

In case of a health emergency, seek immediate medical attention.

Pest control signs must be posted prior to treatment in many instances. The signs should be posted in an area of common access at least 48 hours prior to treatment. The information on the sign will allow you to contact someone who can tell you what pesticide is being used.

If you are contracting for pest control services due to a home solicitation, you have the right to cancel the contract within 72 hours. You may exercise this right by notifying the pest control company, prior to receiving service, that you do not wish to receive their service.

For general information on pesticides contact the National Pesticide Telecommunications Network at 1-800-858-7378.

For information concerning structural pest control laws, contact: Structural Pest Control Board (512) 835-4066.

For information concerning the formulation and registration of pesticides, contact: Texas Department of Agriculture (512) 463-7476.

For non-emergency health information relating to pesticides, contact: Texas Department of Health (512) 458-7111.

This form is needed when a pest control "emergency" exists that justifies waiving the 48-hour posting requirement of Section 595.6 (a)-(c). An emergency is defined as "an imminent hazard to health or property or an imminent infestation..." Emergency treatments are permitted in the localized area of infestation only. A copy of the completed form should be kept in the pest control records file by the business or the certified non-commercial applicator performing the service. Provision for use of this sign is made in Section 595.6 (d) of Title 22, TAC.

Emergency Waiver for Schools

This is to verify that, in the opinions of the undersigned, a pest control emergency requiring immediate treatment exists in the areas listed below. Such emergency treatments will be limited to the minimal area necessary to resolve this emergency.

Name of School: _____

Description of emergency situation (please list pests and justification for emergency request): _____

Application site or area: _____

Date of treatment: _____

Green List ☐

Yellow List ☐

Red List ☐

Approval of IPM coordinator

Approval of Certified Applicator

Green List products may be used at the discretion of the licensee.

Use of **Yellow List** products requires written approval from the certified applicator. A copy of the approval must be sent to the IPM coordinator.

Use of **Red List** products requires written approval from the certified applicator and IPM coordinator. A copy of the approval must be sent to the Structural Pest Control Board, P.O. Box 9536-172, Austin, Texas 78766, no later than 14 days after the application.

According to Section 595.8 (c) of Title 22, Texas Administrative Code, all schools that periodically apply pesticides indoors are required to notify parents or guardians of children attending that school about pesticide use at the time of the child's registration. Notification is the responsibility of the chief administrators of the school or educational institution or day-care.

Notice to Parents

This school periodically applies pesticides as part of an integrated pest management program. All persons applying pesticides at this school are required to receive special training in pesticide application and pest control. In addition, this school has a policy that requires use of non-chemical pest control tactics whenever it is possible that pesticides may periodically be applied.

Should you have further questions about pesticide use, including the types and timing of treatments, you may contact:

(IPM Coordinator)

at

address: _____

telephone: _____

The following notice, or one containing the same information, must be posted in an area or common access that school staff in the area to be treated "are likely to check on a regular basis at least 48 hours before each planned treatment" [Section 4G (e) of Article 135B-6 of the Texas Revised Civil Statutes]. Such signs must be at least 8 and ½ inches by 11 inches in size [Section 595.6 of Title 22, Texas Administrative Code].

Notice of Pest Control Treatment

Application site or area: _____

Date(s) of planned treatment: _____

Time and date when area is safe to reenter: _____

For more information call or contact:

(IPM Coordinator)

A Consumer Information Sheet may be obtained from the management.

Pest control applicators are licensed by the Texas Structural Pest Control Board. To report a case of suspected misuse of pesticides, or for more information about the laws pertaining to pesticides, contact the Structural Pest Control Board at 9101 FM 1325, Suite 201, Austin, Texas 78758, (512) 835-4066.

For general information about the health effects of pesticides call the National Pesticide Telecommunications Network at 1-800-858-7378

This form is provided as an example of the types of information that must be recorded each time a pesticide or pest control device is used in a school. Such records must be kept on file by the pest control business or the noncommercial applicator servicing the school for a period of two years [Section 595.4, Title 22, Texas Administrative Code]. Schools or pest control businesses may develop their own forms as long as the information listed below is included.

Commercial and Noncommercial Pest Control Use Records

For record keeping purposes, a copy, or equivalent, of this form should be kept on file.

(a) Name of customer or employer _____

(b) Address _____

(c) Pesticides or devices used _____

(d) Amount of pesticides or devices used _____

(e) Percent of solution _____

(f) Target pest _____

(g) Date the pesticide or device was used _____

(h) Service address or application site _____

Weighted Factor Rating Form for Evaluating Pest Control Bids

MAXIMUM RATING		SUPPLIER		
FACTORS	(weights)	A	B	C
<u>Technical Factors:</u>				
Familiarity/experience with IPM	10	___	___	___
Technician experience/training	10	___	___	___
Previous experience in schools	10	___	___	___
Access to board certified entomologist	5	___	___	___
<u>Price Factors:</u>				
Realistic time/pricing estimates	15	___	___	___
Price	30	___	___	___
<u>Other Factors:</u>				
Manpower resources	5	___	___	___
Ability to respond to emergency requests/calls for service	5	___	___	___
Managerial, financial capabilities	5	___	___	___
Quality control program	5	___	___	___
TOTAL SCORE		___	___	___

Price should not be the only factor when judging bids from competing pest control firms. This weighted factor rating form can be used to help evaluate each bidder on several criteria. The above factors and weights can be modified by each school district according to its individual priorities.

D-1404

Texas Agricultural Extension Service
Pesticide Applicator Training Manuals
Order Form - Structural

Below is a description of study materials available from the Extension Service to help you prepare for license exams. In addition to the general manual and at least one category manual, you will need the publication, *Structural Pest Control Board Laws and Regulations*, from the Texas Structural Pest Control Board. Also contact the Board at (512)835-4066 for information about license categories and tests.

1. **General Manual: Commercial/Noncommercial/Technician** -- Addresses subject matter applicable to all categories of certified application established under the Structural Pest Control Act.
2. **Pest Control** -- For persons who inspect for or control insect and animal pests which invade homes, stores, restaurants and other structures or which are a general nuisance, but do not normally attack the building itself.
3. **Termite Control** -- For persons who inspect for or control termites, beetles and other wood-destroying organisms in buildings, including homes, warehouses, stores, docks and other structures.
4. **Ornamental and Turf** -- For persons who inspect for or control weeds, pests and diseases on ornamental plants, shade trees and shrubs in a park or adjacent to a residence, business, industrial plant, institutional building or street.
5. **Fumigation** -- For persons engaged in pest inspection or control through fumigation of structures, food stuffs, warehouses, ships, railroad cars, etc.
6. **Wood Preservation and Wood Products Treatment** - Only for persons who use wood preservatives classified as restricted-use pesticides. Covers use of preservatives to protect wood products from damage by insects, fungi and marine borers. Includes cross-ties, poles, posts, etc.

Use the form below to order these study manuals. Mail this form, along with a check or money order payable to the Extension Service, to:

Texas Agricultural Extension Service, P.O. Drawer FS, College Station, TX 77841

For questions about your order, call (409) 845-3849.

Date: _____ Name: _____ Company Name: _____

Physical Delivery Address: _____

City: _____ State: _____ Zip: _____ Phone: () _____

MANUAL	COST	QUANTITY	TOTAL COST
B-5073 General Manual: Commercial/Noncommercial/Technician	\$ 10		\$
B-5074 Pest Control	\$ 10		\$
B-5075 Termite Control	\$ 10		\$
B-5066 Ornamental and Turf	\$ 10		\$
B-5064 Fumigation	\$ 10		\$
B-5076 Wood Preservation and Wood Products Treatment	\$ 10		\$
*Delivery Options: 2nd Day	\$ 10		\$
Next Day	\$ 20		\$
Cash-on-Delivery (C.O.D.)	\$ 5		\$

*No charge for standard 3 to 5 day delivery

Grand Total \$ _____

Extension Use Only:

Shipped: _____ UPS Ground _____ Next Day _____ 2nd Day _____ U.S. Mail; By: _____ Date: _____

Important Telephone Numbers and Addresses for IPM Coordinators

*Regarding Extension "IPM in Schools"
programs and materials, contact:*

Texas Agricultural Extension Service
Attention: IPM in Schools
P.O. Drawer FS
College Station, Texas 77841
fax (409) 845-6251

*Regarding Extension study materials for
structural pesticide applicator license exams, use
order form in the Appendix. Submit order by
mail, or fax (409) 845-6251. Advance payment
or purchase order number requested. Allow one
week for normal delivery.*

*Regarding Red List pesticide use and "IPM in
Schools" legal questions, contact:*

Texas Structural Pest Control Board
P.O. Box 9536-172
Austin, Texas 78766
fax (512) 837-7722

*Regarding other structural pest control laws,
and license requirements and exams for
noncommercial structural pesticide application,
contact:*

Texas Structural Pest Control Board
9101 FM 1325, Suite 201
Austin, Texas 78758
fax (512) 837-7722

*Regarding general information on pesticides,
contact:*

National Pesticide Telecommunications Network
(800) 858-7378

*Regarding non-emergency, pesticide-related
health information, contact:*

Texas Department of Health
(512) 458-7111

*Regarding the formulation and registration of
pesticides, contact:*

Texas Department of Agriculture
P.O. Box 12847
Austin, Texas 78711
(512) 463-7476

*Regarding the disposal of pesticide containers,
oil and oil filters, tires and batteries, contact:*

Texas Natural Resource Conservation
Commission
(512) 239-4748

*Regarding insect identification and IPM training
resources, contact:*

National Pest Control Association
(800) 678-6722

Additional Contacts:

Texas Association of School Administrators:
Administrative Services
406 E. 11th Street
Austin, Texas 78701-2617
(512) 477-6361

Texas Association of School Boards
Facility and Environmental Consultants
P.O. Box 2947
Austin, Texas 78752
(800) 580-8272

Texas Pest Control Association
8000 Centre Park Drive
Suite 350
Austin, Texas 78754
(800) 548-8722

Entomologists at Texas Agricultural Extension Service district offices:

1. (806) 359-5401; 6500 Amarillo Blvd. W.
Amarillo, Texas 79106
2. (806) 746-6101; Rt. 3, Box 213AA
Lubbock, Texas 79401-9746
3. (817) 552-9941; Box 2159
Vernon, Texas 76384-2159
4. (214) 231-5362; 17360 Coit Road
Dallas, Texas 75252-6599
5. (903) 834-6191; P.O. Box 38
Overton, Texas 75684
6. (915) 336-8585; Box 1298
Fort Stockton, Texas 79735-1298
7. (915) 653-4576; 7887 N. Hwy. 87
San Angelo, Texas 76901-9782
8. (817) 968-4144; Rt. 2, Box 1
Stephenville, Texas 76401
9. (409) 845-6800; P.O. Box 2150
Bryan, Texas 77806-2150
10. (210) 278-9151; P.O. Box 1849
Uvalde, Texas 78802-1849
11. (512) 265-9203; Rt. 2, Box 589
Corpus Christi, Texas 78406-9704
12. (210) 968-5581; 2401 E. Hwy. 83
Weslaco, Texas 78596-8344

[illegible]

[Blank Page in Original Bulletin]

Educational programs of the Texas Agricultural Extension Service are open to all people without regard to race, color, sex, disability, religion, age or national origin.

Issued in furtherance of Cooperative Extension Work in Agriculture and Home Economics, Acts of Congress of May 8, 1914, as amended, and June 30, 1914, in cooperation with the United States Department of Agriculture. Zerle L. Carpenter, Director, Texas Agricultural Extension Service, The Texas A&M University System.

2M-7-95

BS